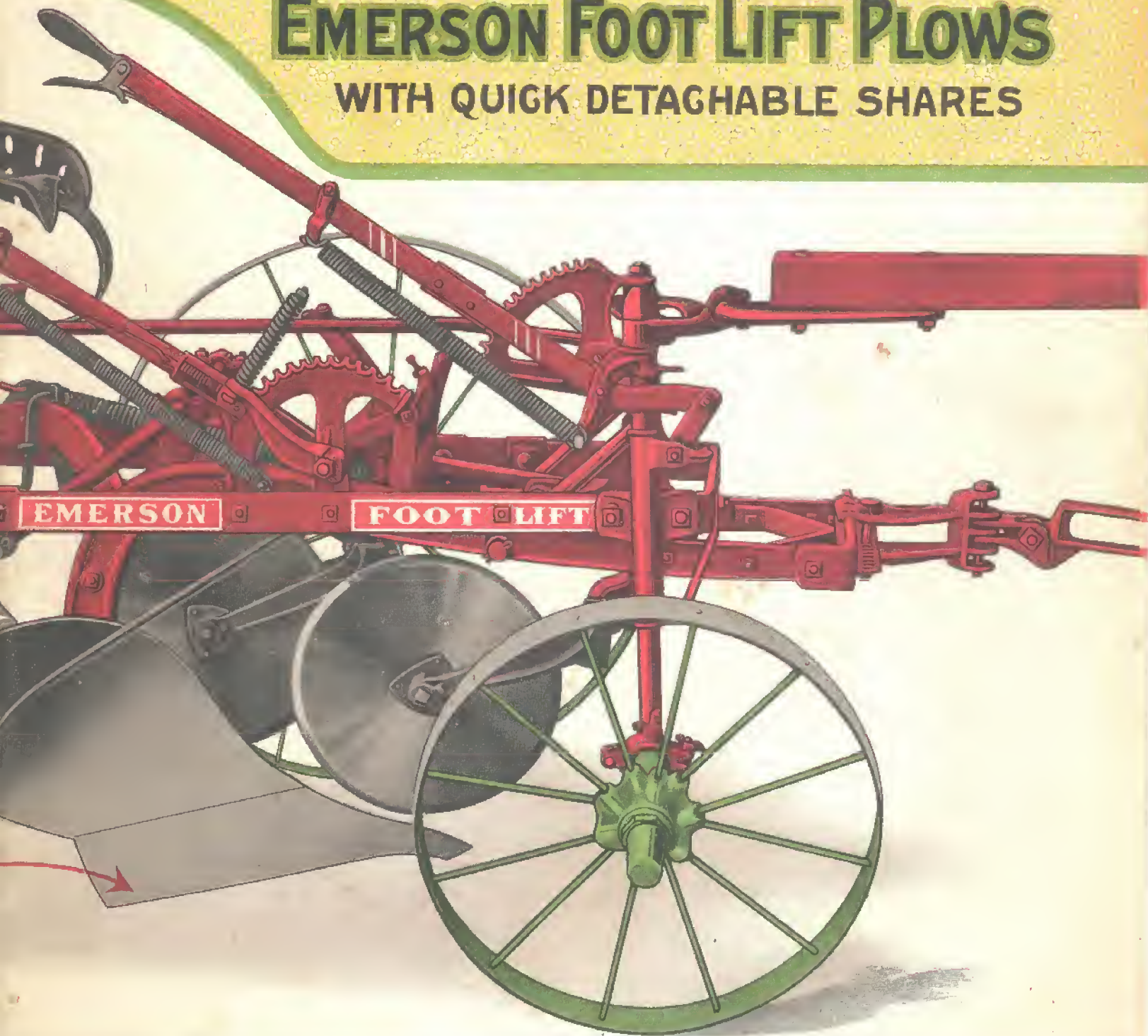


# The Line

## EMERSON FOOT LIFT PLOWS WITH QUICK DETAGHABLE SHARES



EMERSON-BRANTINGHAM IMPLEMENT CO., INC.

Good Farm Machinery.

ROCKFORD, ILLINOIS.

Established 1852.

A BOOK ABOUT

# Emerson Plows



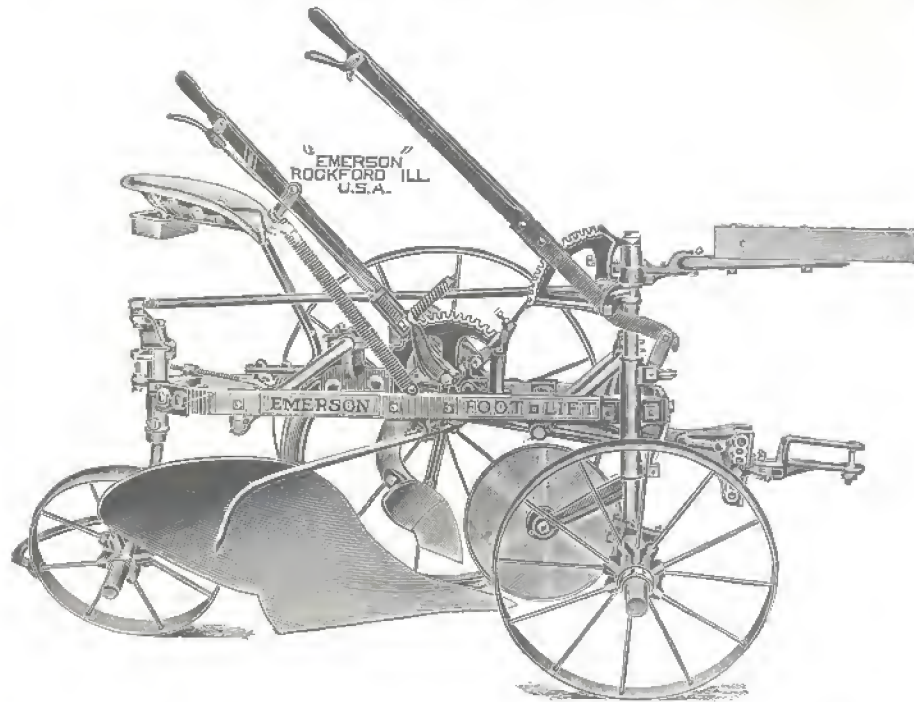
This small man with his feet alone raises a 14-in. Gang  
and the added weight of the big man, 506 lbs.

**EMERSON-BRANTINGHAM IMPLEMENT CO.**  
(Incorporated)

Good Farm Machinery—Established 1852

ROCKFORD, - - ILLINOIS, U. S. A.





## “That Emerson Foot-Lift Sulky Plow”

Built in Right and Left Hand.

AS you look upon this splendid plow and note its symmetry, its gracefulness, its adaptability, its lightness, its readiness for work, its promise of rich fulfillment, do you not realize in some degree the same keen sense of pleasure which always accompanies the examination of a beautiful picture, a high bred and graceful creature, a perfect machine? Kindly look again—though it be with a coldly critical eye—and see if your sense of pleasure is not strengthened and confirmed. We ask this more than passing notice because we firmly believe—and our belief is strengthened because hundreds of farmers have told us so—that in those many and various things that go to make up “plow excellence” this plow stands **without a peer**. By reading further you will learn that the parts you cannot see have all the splendid merits of those in plain view. For this plow is the culmination of 29 years of work and continued experiment. Its every part has been subjected to the most rigid inspection and its merits perfected, until its super-

iority is conceded and its leadership acknowledged—an almost perfect machine, admirably adapted for its work.

Nor can its most important features be embodied in competing plows, for these features are amply protected by patents which we hold, and are confined exclusively to the Emerson Plows.

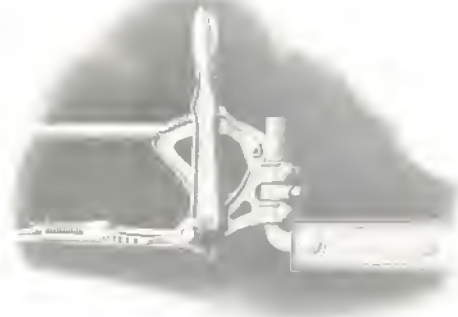


Fig. 1.  
Shows Landing Lever—Handy to Driver.  
A splendid help in finishing a land.

This is a plow which inspires hopes of high promise, and it fulfills the highest expectations in the most generous measure.

If you, the user, were asked what constitutes the most important features of a riding plow, you would perhaps answer: **Ease of Handling, Lightness of Draft, Durability.** These three things you would positively insist upon; and of course you would appreciate any other desirable features that the plow possessed.

You are personally interested in riding plows, either now or for the future. You are interested in their working, their construction, and you want to know which is in truth the best. We ask a few minutes of your time, while, in print, we critically examine the Emerson, and we believe you will be amply convinced that it possesses to the highest degree the qualities which will stamp it with your approval—that in fact, it is of all plows the most satisfactory and profitable for you to purchase for yourself, or to favorably mention in conversation with your friends.

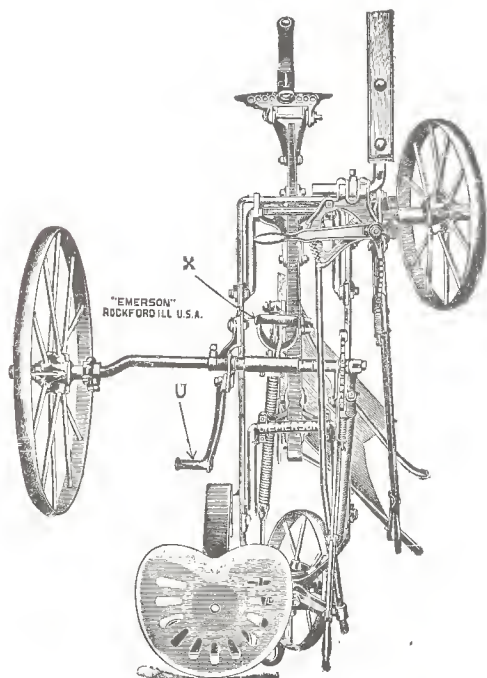


Fig. 2.

Let us inquire what this plow does, and how and in what manner it performs its difficult work, and then inspect its various parts.

### WHAT IT WILL DO

Approach the left side, place the left foot on the foot lever, U, and with perfect ease you swing into the convenient seat. The two hand levers, being on the right hand side, are entirely out of the way. From this position let us examine the working. Place the right foot on the force down lever, X, and with one movement the plow is unlocked, lowered and locked firmly in the ground. No matter how hard may be the soil, this one, simple, easy pressure on the enormously powerful lever, assisted by the natural suction of the plow as arranged, easily and quickly forces it full depth into any kind of ground. And when once set for depth and leveled by the hand levers, you have perfect control by the feet alone, forcing the plow into the ground and raising it as often as desired without touching the hand levers—an advantage possessed by no other plow.

By pressing the left foot, on the raising lever, U, you easily lift the plow from any kind of soil. So powerful and so ingeniously constructed are the levers that the smallest boy capable of driving, can readily and with ease, force the plow into the hardest soil, and lift it out as desired.

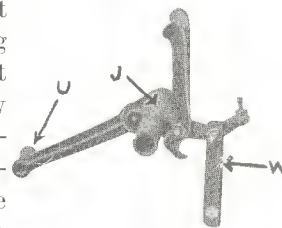


Fig. 3.

The foot levers can be quickly adjusted to fit any length leg; and when walking behind the plow you can, with one hand, easily operate the foot lever without stopping the team.

There are but two hand levers, both on the right hand side, one for regulating the depth of the plow and the other for leveling it after being set the proper depth. They require no further attention when this has been done.

They are out of the way when mounting and dismounting and afford a distinct advantage over plows which are obliged to have one lever inconveniently at the left hand—obstinately in the way.

Here, indeed, is convenience of plow management! Your hands are free for driving, and at the ends of the fields you can easily manipulate the plow with the feet while you have both hands free to guide the horses.

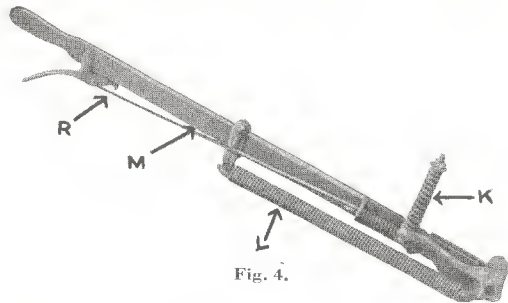


Fig. 4.

This plow is effectively relieved from jolt or jar by a cushion spring, K, (Fig. 4) at the end of the landwheel axle, which absorbs all the motion; and for extremely rough places, such as crossing corn rows, the ratchet (R, Fig. 4) on the leveling lever may be locked out of the ratchet, insuring an even, level furrow.

Should you have occasion to plow among stumps or stones, the lock-down device is readily adjusted so the plow will easily pass over any obstruction it meets. It is altogether free from the too common fault of swinging and giving in the frame and making uneven, irregular furrows; the five strong connecting points with the frame cause it to run firm and true on all occasions.

It is remarkably light of draft—and we emphasize the word remarkably. The dynamometer tells us this, and the dynamometer is a cold-blooded machine which speaks only the truth. Many causes contribute to this lightness of draft. The wheels are several inches larger than on other plows, and large wheels, as you know, pull easier over rough surfaces than small wheels. They are equipped with the

famous Emerson 2,000-mile magazine axles. These axles (Fig. 7) are 5 to 7 inches longer than other axles; they are arranged to absolutely prevent the entrance of dust, (P, Fig. 9) and they retain all the oil. They hold the wheels firm and true, prevent the wobbling which so greatly increases the draft, and they add many years to the life of the machine. Then, too, the daily drudgery of greasing is done away with; one greasing of the axle amply sufficing for full fifty acres of plowing.

By means of a yielding rod connection direct with the tongue, both furrow wheels are thoroughly controlled, insuring straight and even furrows, and also rendering it impossible to cramp the plow in turning. Square corners can easily be turned either to the right or the left.

The axle for rear furrow wheel is provided with two adjusting screws, (G, Fig. 6) and a simple turn of one of these screws adjusts the wheel so it cor-

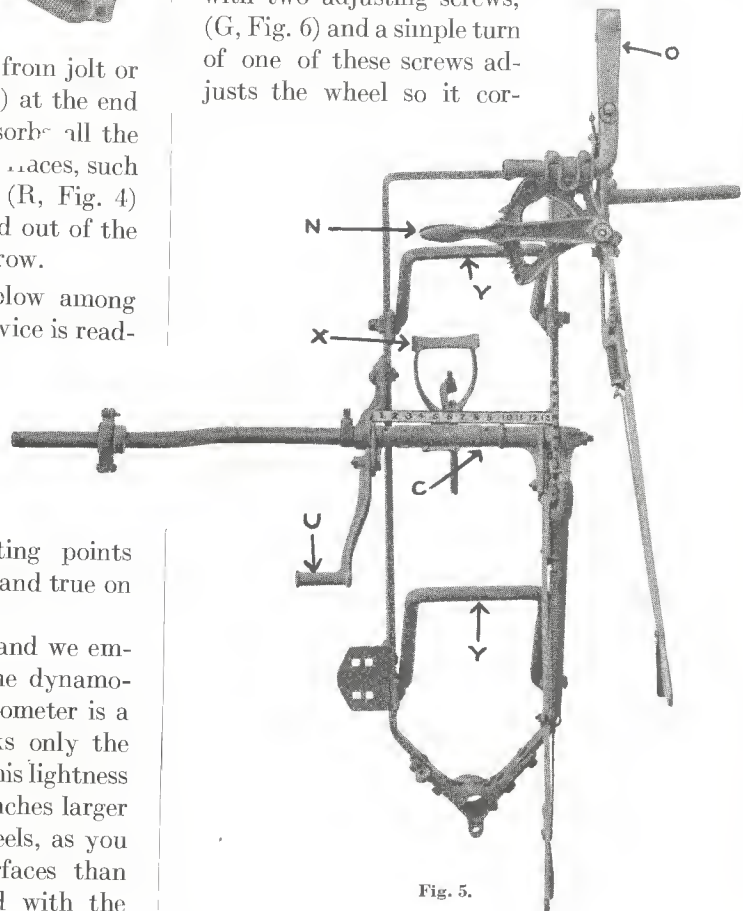


Fig. 5.



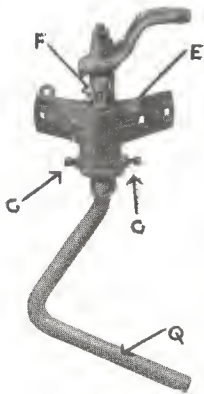


Fig. 6.

rectly balances the plow as to side draft, relieving the friction on the landside and permitting it to be carried by the wheels, thus greatly reducing the draft.

Notice that practically the entire weight and strain of the plow is supported by the two front wheels, (Fig. 2) bringing your load close to the team and carried on the wheels, which, as stated, are four or five inches high-

er than others use, whereas, most plows have the greater part of the weight on the rear wheel, which is the smallest and farthest from the team. The weight of our plows must be carried on the wheels, and all friction, except that of the dirt against the moldboard, is carried on thoroughly lubricated dust-proof bearings.

Nor should we ignore the lightness of the whole implement. This plow, stronger, more durable, more substantial than others, is nevertheless ninety to one hundred pounds lighter, and the team has that much less weight to pull.

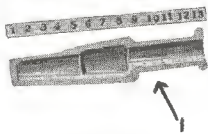


Fig. 7.  
2,000-mile Magazine  
Boxing.

Having briefly noted what the plow will do—its ease of running, its regular, even, perfect furrows, its convenient manipulation, its time and labor saving devices, its durability, we feel sufficiently interested to hastily glance at a few of its most prominent features.

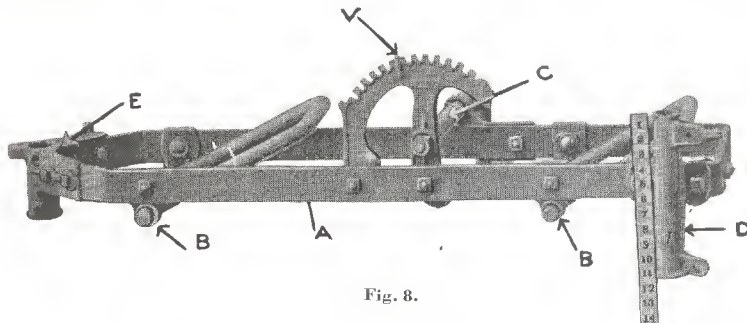


Fig. 8.

**The Frame**—which is the foundation on which its life depends—is made in one piece, from a single heavy bar high carbon steel (A, Fig. 8). Then, to add to the great strength which one piece insures, the axle of the land wheel extends across almost at the middle (C, Fig. 5) and is securely fastened to both sides of the frame, making a powerful brace where most needed. This axle also forms an ample support for the weight and strain of the plow. It distributes this great strain evenly upon the frame without any destroying twist. Most other plows, as you know, have the land wheel axle at the left hand side of the frame, and this short axle, with its liability to loosen the supporting bolts, and even cut them off under the twisting strain, has caused farmers an enormous expense in time and money.

**The plow bottom** is worthy your careful consideration. It represents an immense amount of ingenious study and experiment to obtain the greatest possible strength and perfect scouring qualities. It has solid, compressed steel frogs, instead of cast frogs, and the braces are very heavy. The bottom is built as solid as we can make it from soft-center steel, skillfully tempered, and in fact, is guaranteed against breakage. It is made in a variety of shapes to meet the conditions in all sections of the country. See pages 6 and 8.

All moldboards, shares and landsides for Emerson bottoms are interchangeable, so when the parts are worn, new ones can easily be substituted without the necessity of incurring the time and expense of calling on a blacksmith or plow repairer.

We called attention to the firmness of the plow in the frame, and this is largely due to the short bails and bail brackets. They carry the great side strain of the plow bottom in the shortest and most rigid connection direct (B, Fig. 8) to the frame, insuring great durability and freedom from springing, and overcoming a most serious

weakness found in other plows, which have long bails and bail brackets.

**The wheels**, made in our own factory, have staggered spokes, 2-inch tires and are held in place on the axles with collar (P, Fig. 9) and set screws located on the inside of the hubs, dispensing entirely with the old fashioned inferior collar and cotter pin so frequently found on other machines. As previously explained, the wheels are several inches larger than others, a feature that insures lightness of draft and durability.

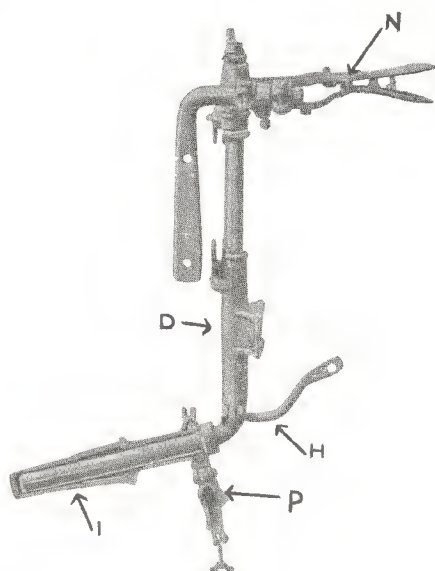


Fig. 9.

**The front furrow axle** has a greater range up and down than any other plow, being a little over seven inches, as against five in other machines; as this axle guides the plow besides bearing its share of the draft weight, it is provided with extra long bearings (D, Fig. 9) and is further strengthened by a heavy cross brace (H, Fig. 9) connected to the solid one piece frame.

**The coulter bearings** are chilled and cone shaped; they wear on a true center and have no tendency to wobble. The coulter stems are one piece, fastened to the beam by passing through a long socket, and are firmly held in position by a set screw. They are ingeniously

made so the coulter may be instantly set to cut more or less land—or forward and back—by simply loosening the set screw and turning the stem to the desired position. The work of the plow depends more than is supposed on the “set” of the coulter, and this little matter of perfection of detail is one of the many features which contribute to the superiority of the Emerson Plows.

Do you note that in this brief description we have dwelt on the fundamental and essential features of the plow—the parts which have to do with real efficiency and service—and have refrained from unimportant “talking points” intended to confuse rather than enlighten.

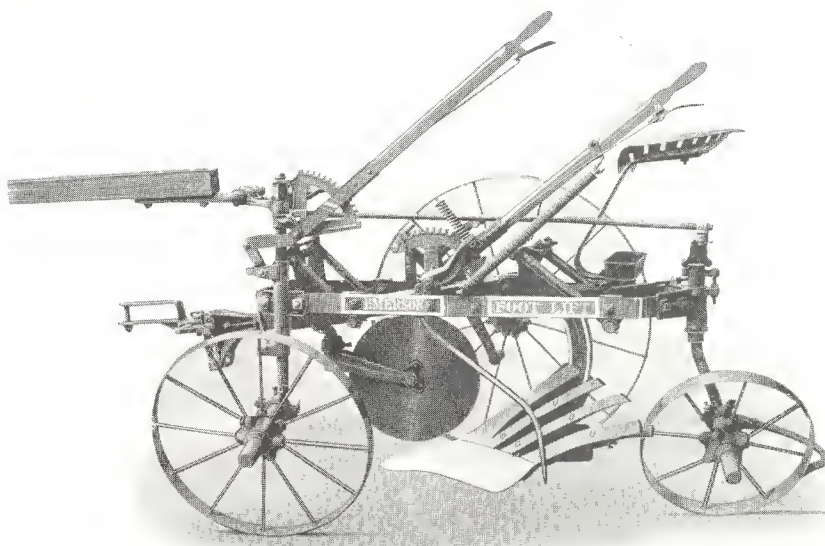
Our plows have made a record never before approached in the history of farm implement manufacture. They have revolutionized wheel plow building as is evidenced by the fact that every wheel plow designed within the last few years attempts an imitation of the Emerson Foot-Lift feature. Our plows have won the verdict of the plow users of the country who pronounce them the most satisfactory, the most popular and the best riding plows made. This verdict could not be obtained without just reason, and that reason is expressed in one word—superiority.

When you invest your money in a plow, you want one that is easy to handle. You want a plow that is light draft and you certainly want a plow that is durable, in fact, you want an **Emerson Foot-Lift Plow**.

These facts are submitted to your discriminating judgment, and we await your decision with confidence.

See page 6 showing different styles of bottoms.

OE8	14 and 16"	Old Ground Bottom
OE5	12, 14 and 16"	Slat-Stubble Bottom
CE2	10, 12, 14 and 16"	Turf and Stubble
BE4	12, 14 and 16"	Black Land
PE2	12, 14 and 16"	Prairie Breaker
PE9	12, 14 and 16"	Rod Breaker
EE	10, 14 and 16"	Chilled
EC	10, 14 and 16"	Combination Chilled



### THE EMERSON FOOT-LIFT SULKY

#### Equipped with Slat Bottom

In some sections where ground is exceptionally hard to scour and conditions are not favorable to use a regular moldboard plow, the Emerson Slat Bottom Plow does the work in nice manner and overcomes any of the above difficulties. The beam is of heavy high carbon steel, made to withstand the strain put upon it. We show a detailed view of the Emerson

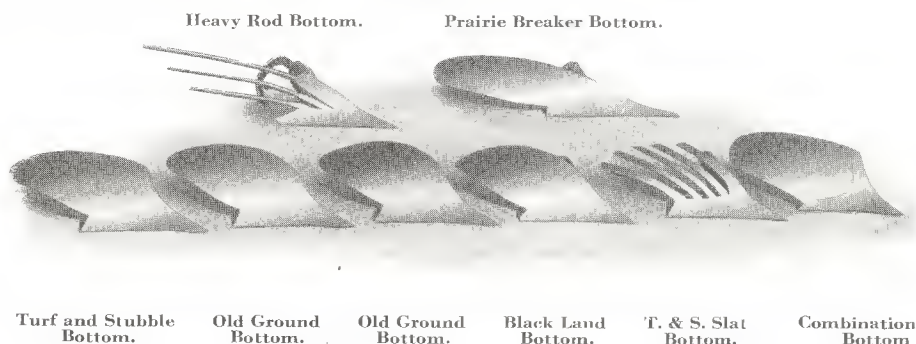
construction. This plow is made right or left hand.

The slats are of soft center steel and the slats are built with a wider space between them at the top than at the bottom, so that gravel and dirt will not lodge, and again, the slats are narrower at the rear side than they are at the front, making a bevel between the two slats.

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### EMERSON RIDING PLOW BOTTOMS

Shown below, are just a few of the many bottoms that may be furnished with Emerson riding plows. All of them except the Combination bottom are furnished with the Patented Quick Detachable Share, shown and described on page 8.

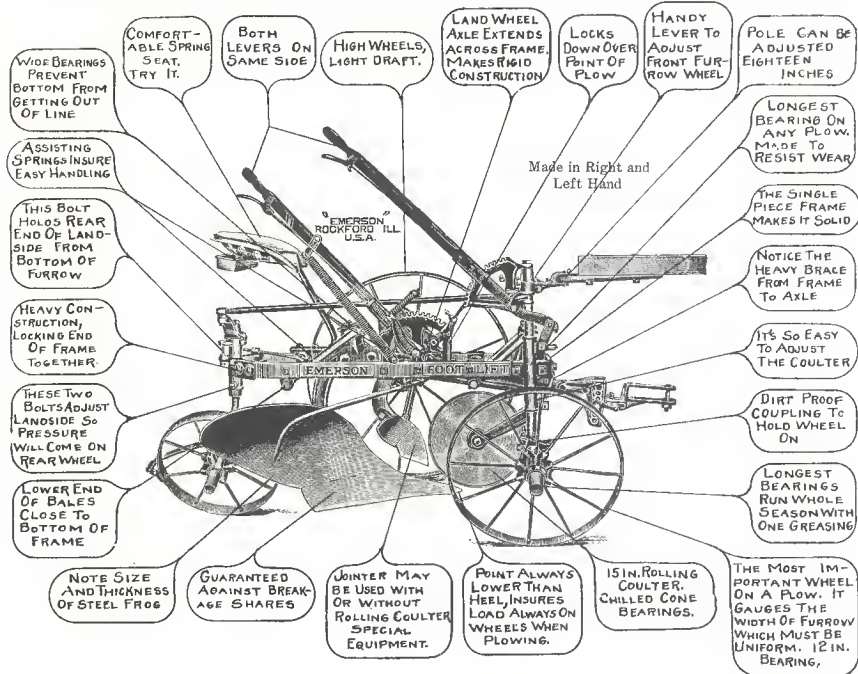


Heavy Rod Bottom.

Prairie Breaker Bottom.

Turf and Stubble  
Bottom.Old Ground  
Bottom.Old Ground  
Bottom.Black Land  
Bottom.T. & S. Slat  
Bottom.Combination  
Bottom

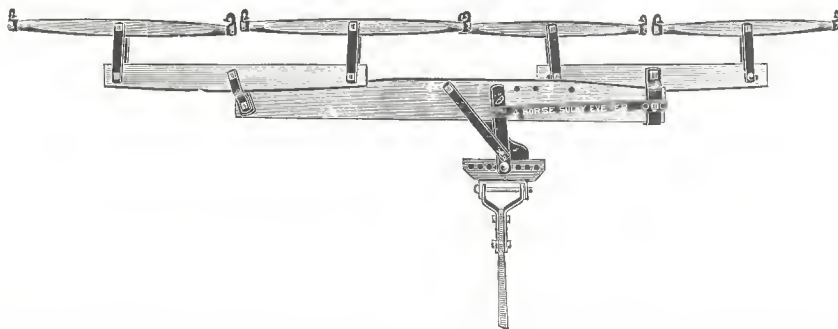




The foregoing pages have gone quite thoroughly, and, we believe, convincingly, into why you should buy an Emerson Foot-Lift Sulky or Gang Plow, and the picture above points out quite plainly the features as they are shown on the plow.

Every one of these pictures show features that are really good—not merely talking points gotten up to confuse. When you put your

money into a sulky or gang plow, you do it with the hope that it will not be necessary for several years to buy another, and this is why we are showing you that it is to your interest to buy an Emerson, and at the same time make you a satisfied customer, so that your neighbors and friends will likewise buy an Emerson after talking to you about yours.



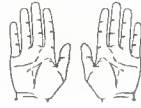
#### EMERSON 4-HORSE ABREAST SULKY HITCH WITH SET-OVER ATTACHMENT

This 4-horse Emerson Sulky Evener is designed for four light horses when doing extra heavy sod or stubble plowing. It's really an attachment for using the 4-horse Gang Hitch on the Sulky. It throws the center of hitch to

one side of the center of the team so one horse in the furrow and three on the land work comfortably. Attach for four horses as shown in cut.

## Emerson New Quick Detachable Share

Removed in 3 seconds

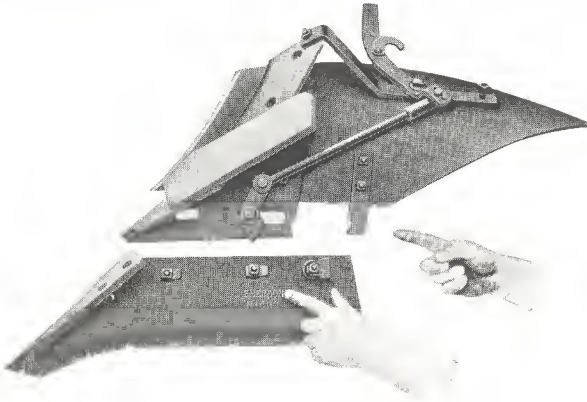


Replaced in 5 seconds

### USING ONLY THE HANDS

**T**HE three illustrations shown herewith, describe the operation of the Emerson Quick Detachable feature and its simplicity, almost as graphically as though looking at the Share itself.

It is apparent that no wrench or other tools are used; simply the hands are required to change the Emerson Share. This is unquestionably the greatest advantage that has been given Emerson Plows since the Foot Lift was introduced.

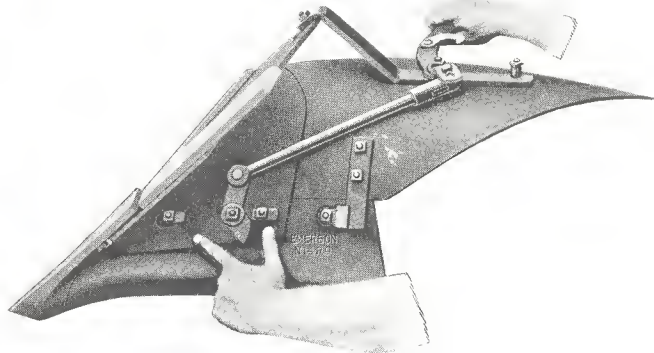


A

Showing slots, studs and levers. The Patented features of the Emerson Quick Detachable Share.

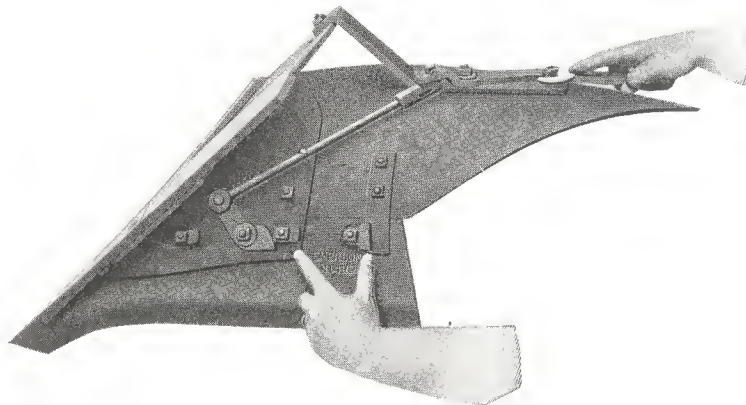
B

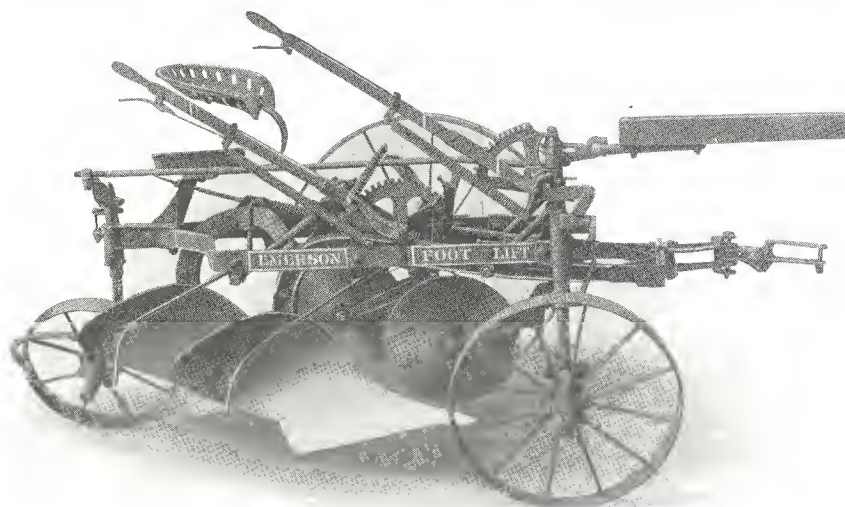
Showing the studs in slots ready for locking. Notice the leverage secured by the cam movement, the most powerful of mechanical levers.



C

One pull of the lever forces Share in position when lever joint passes the center and locks solid. The hook at right fore finger acts as an additional lock.





## EMERSON FOOT-LIFT GANG PLOW

Made in Right and Left Hand.

If perchance you have much or heavy plowing to be done which you wish pushed through with dispatch and accomplished with ease, the Emerson Foot-Lift Gang Plow is the implement which you surely need.

It is built to perform the most arduous work, and it will execute its task to your entire satisfaction. It is exactly like the Sulky, except that the construction is heavier and stronger, thus enabling it to stand the greater strain to which it is subjected; and in addition it has one extra beam and bottom.

Every feature of time and labor-saving device possessed by the Sulky is embodied in the

Gang. It is manipulated entirely by the feet, leaving the hands free to manage the four horse team abreast, thus rendering this arrangement of horses easy and convenient to manage.

Where the greatest strain occurs there is ample strength to meet it.

The rear bottom brace is of unusual thickness, and turns down on the inside of both beams beyond the bend, taking three bolts, which materially increases their rigidity and strength.

The front ends of the beams are secured with heavy diagonal braces, to which is attached our heavy 24-inch clevis bar. This affords sufficient adjustment for the four horse evcners to allow two pairs of horses to pull together in direct line of draft, thus conserving all their strength. So rigid are the beam connections that it is impossible to spring them.

Both beams are locked down over and in front of the share point; an advantage to which we particularly call attention, because in other plows of this kind but one bottom is locked, and that at a point to one side and near the heel of the plow, which allows an up and



**Emerson Gang Rear Beam Brace.**

The bracing of beams is a vital point in a Gang Plow. This brace is stronger, it is bolted lower down and has heavier bolts than any other Gang Plow on the market.



down movement to the other bottom, and also throws the weight of the carriage on the plow bottom, a most objectional feature.

You have doubtlessly seen where a hard road was being plowed with a walking plow that a man or other weight was placed on the beam directly over the share point to keep the plow in the ground. We are the only plow builders who have adopted this proper method of lock-



**Emerson Gang Front Beam Brace.**  
With this diagonal brace it is impossible for the frame to wrench or twist by contact with rocks or stumps.

ing and holding the plows in a rigid correct position, whether for hard or soft ground, for it is evident that if you hold the points of the plow bottoms to their work, the entire weight of the plow, the frame and bottom must be carried on the wheels.

Nor has the appearance been neglected in this completed implement. The graceful outlines of the machine are supplemented by a beautiful finish, rendering it most pleasing to the eye.

In conclusion, we believe that the Emerson Gang Plow will meet your requirements better than any other, and that it will plow more, plow easier for your horses, easier for yourself, and plow better than any other which may be offered.

Equipped with Quick Detachable Share, shown on page 8, and with any bottoms as shown on page 6.

**Emerson Gangs made in the following sizes and styles bottoms:**

OE8	10, 12 and 14"	Old Ground Bottom
OE5	12 and 14"	Slat-Stubble bottom
CE2	10, 12 and 14"	Turf and Stubble
BE4	12 and 14"	Black Land
PE2	12 and 14"	Prairie Breaker
PE9	12 and 14"	Rod Breaker
EE	10 and 14"	Chilled
EC	10 and 14"	Combination Chilled

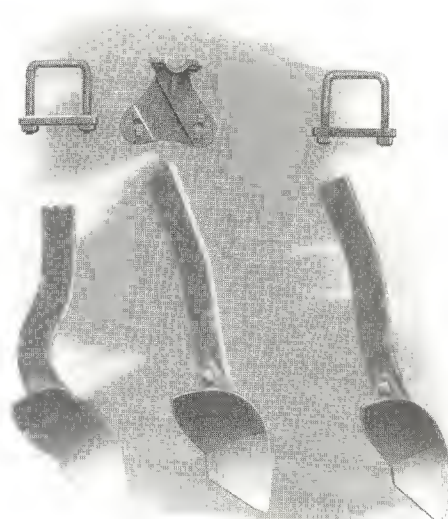
**Jointers** have been used in the east for many years for plowing tame sod, and the middle west is rapidly adopting them for this purpose. Their working is so satisfactory that no one who has used them in plowing tame sod will ever be satisfied to plow sod without them.

The small share of the jointer cuts and turns over the grass and grass roots and rolls them down in the bottom of the furrow, instead of leaving them on top, and therefore, an ordinary tooth harrow will make a fine seed bed with very little more labor than on old ground plowing.

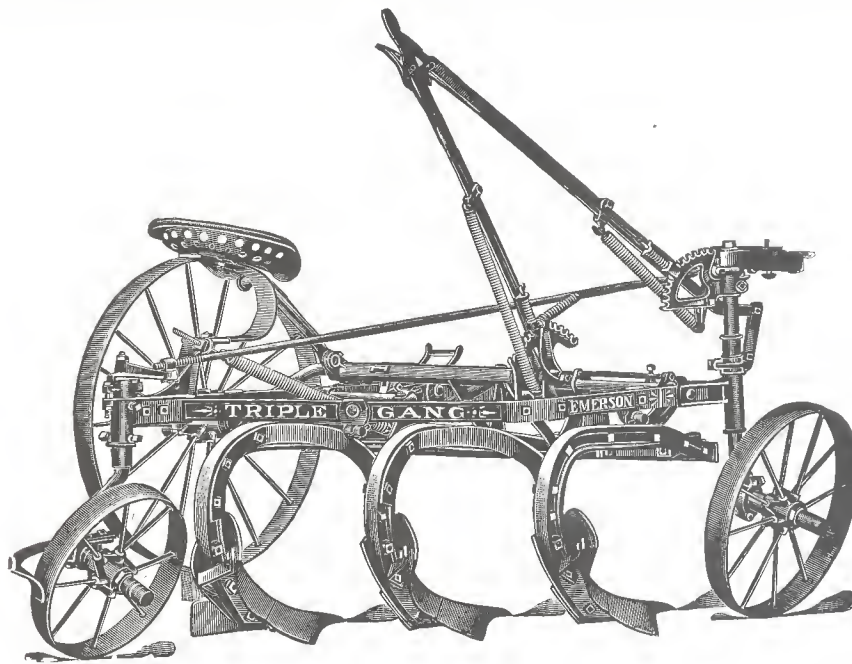
On old ground where there is much trash, they turn all the trash down in the bottom of the furrow, out of reach of the harrow and cultivator, and they bury all weed seed so deep that the crop planted has a good start before the weeds reach the surface.

The jointers add somewhat to the draft of the plow, but they more than compensate for this by the later labor saving and by the enlargement of the crops.

The Emerson Jointer is simple, it is very



easily adjusted, and is built for actual use. They are sold as extras for Sulky, Gang or Walking Plows.



EMERSON FOOT-LIFT TRIPLE GANG PLOW

The tendency towards large teams and a desire to accomplish as much as possible with a man, has brought out the above which makes it possible for one man to plow as many acres as three men can with the old two-horse plow.

By the use of the **Emerson Long Distance** thoroughly lubricated wheel bearings, the high wheels, close hitch and compact construction of the Emerson Gang, we are able to put three 12 or three 14-inch bottoms in our frame and handle them nicely in ordinary work with five horses, or in heavy work with six or seven.

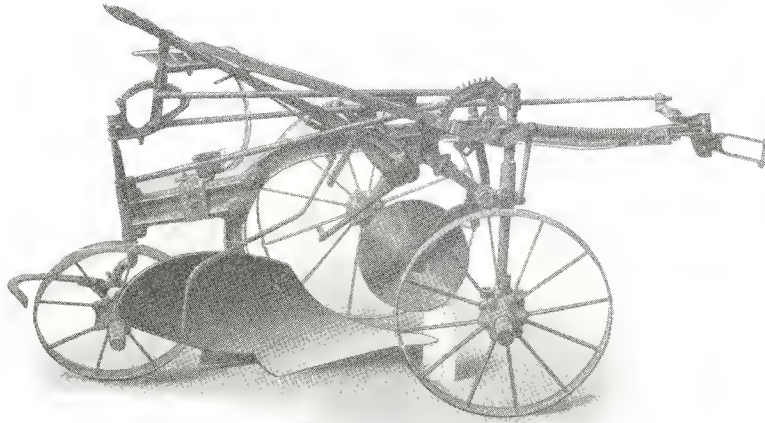
**The Powerful Emerson Foot-Lift** enables the operator to handle this plow with perfect ease, accomplishing with far less effort, the work of three men with three walking plows.

In fact, the same features of **Light Draft, Ease of Handling and Durability** are found in this plow as in the justly popular two furrow Emerson Foot-Lift Sulkies and Gangs. If you want a money maker and a trade builder, buy the Emerson Foot-Lift Triple Gang.

Note the clearance between bottoms. See

the strong bracing of the beams. No clogging in summer fallow, nor springing of beams in prairie breaking. The bottom frame is made on strict mechanical principles, so braced as to withstand the hardest strain. This bottom frame is hung close up to the wheel frame on the famous Emerson short bail brackets. It is locked by the action of the Foot Lever solid to the wheel frame in such a position that the entire weight of plow, operator, and the weight of turning the soil must be carried on the thoroughly lubricated wheel bearings. Axles are  $1\frac{1}{2}$ -inch and every part of the plow carries the mark of perfection that is distinctive of the E-B Line of farm machinery. It is the most profitable plow the large farmer can buy. There's a lot in proper preparation of the seed bed for which the plow is responsible. Get the seed bed right and the crop will be right, and the plow is the all important tool.

Built with 12-inch bottoms with 6-horse combination hitch, also with 14-inch bottoms with 7-horse hitch. Same shapes in 12 and 14-inch as the Foot-Lift two furrow plows. See pages 6 and 8.



Moldboard View.

### THE E-B FRAMELESS FOOT-LIFT SULKY PLOW

A plow designed to appeal to every plow user, being moderate in price, easy to handle, light draft and durable.

**Easy Foot Lift.** The feet handle the plow, the hands manage the team. The raising foot lever responds to pressure of the left foot assisted by the raising spring, and takes the bottom out of the hardest ground by reason of its backward and upward movement. The right foot forces the plow into the ground, point first, insuring quick and easy full depth of furrow.

**High Lift.** Note the share point is full five inches off the floor, providing ample clearance in trash.

**Wheel bearings.** The celebrated Emerson 2,000-mile magazine wheel boxes, dust proof and oil tight. One thorough greasing is sufficient for a season's plowing.

**Draft Control.** Both furrow wheels follow the team in turning corners, either right or left; the plow always follows the team whether the bottom is in the ground or raised to its full height.

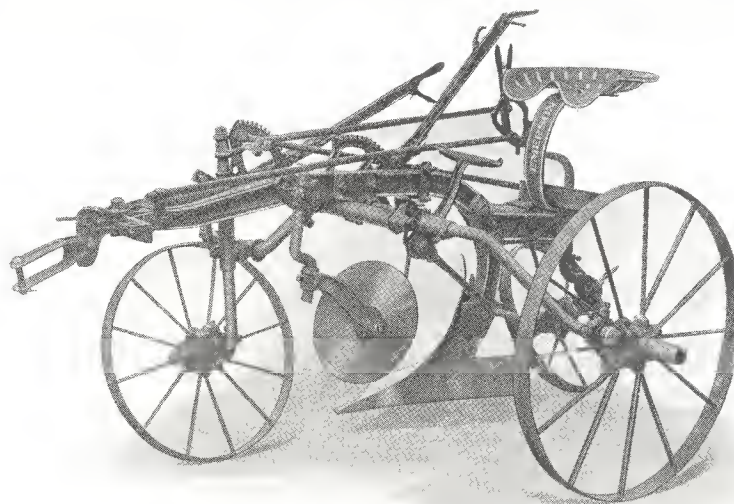
**Landing Lever.** Convenient to right hand of operator, insures full furrow either on side hills or on crooked lands.

**Leveling and Raising Levers.** Both right side of plow, convenient to operator's right hand, and easily adjusted to secure desired depth. A cushion spring on land axle equalizes the uneven surfaces over which the land wheel travels, insuring a steady run; bottom and even depth of furrow.

**Self Leveling.** When raised with the foot lever, the land wheel travels forward, so the seat of the operator remains level at all times.

**Easy Draft.** To the user of riding plows the draft of this plow will be a surprise. We cannot illustrate by words better than to compare the action of this plow when in the ground with the action of a cultivator gang having the yielding spring depth control. The plow bottom is controlled by a spring very similar in its action to the carrying spring on the Wide Cut Standard Mower, whereby we obtain a perfect floating bar. In this machine we obtain what might be termed a floating plow bottom, its depth controlled by the yielding spring which allows the bottom to work through the ground with the least possible friction. Of course, the depth at which the plow bottom runs, is maintained by easily operated hand levers.





Landside View.

### THE E-B FRAMELESS FOOT-LIFT SULKY PLOW.

**A Tongueless Plow** turns readily either right or left without worry for team or operator.

**A Double Latch Hand Lever** provides for locking the plow in the ground, if desired, or unlatched from the lock, the beam and bottom floats as outlined under Easy Draft.

**Coulter Stem Holder** is adjustable and coulter may be set well forward for difficult trash or scouring conditions, or to make room for a jointer in connection with coulter, or the coulter may set well back when the ground is hard.

**Plow Beam** has a very high throat, affording ample clearance for trash or for deep plowing.

**Rear Wheel** is solid pressed steel which prevents winding in wet grass or stubble. While the cut shows the open rear wheel, the solid pressed steel is regular on this plow.

**High Carbon Steel** predominates in the construction of this plow, insuring greatest strength with lightest weight.

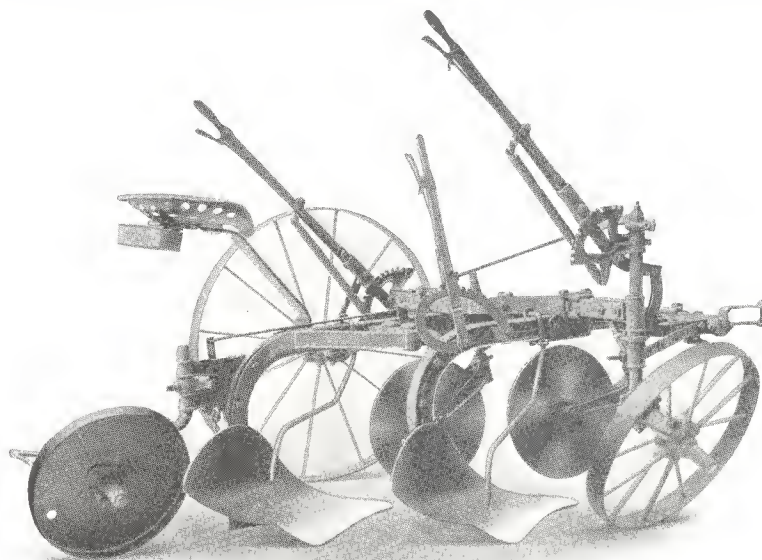
**Few Parts.** Made with the fewest possible parts, this plow will appeal to the man who must make every dollar count, and also to the man who wants all the features of the up-to-

date riding plow. The dealer, therefore, has a larger list of buyers for this plow than for the plows made to please either of the two classes mentioned. It's the biggest plow bargain on the present market.

The construction of the **Front Furrow Axle Bracket** makes it possible to equip this plow with either a 12, 13, 14 or 16 inch bottom, and any wear may be quickly taken up regardless of size of the bottom used. Bottoms are the same as are used on our Emerson Foot Lift Sulky and Gang plows and these bottoms are shown and described on page 6. The same style wheel and wheel box shown on page 4, and in fact a large number of the splendid features found on the plows described in the preceding pages are used on this plow.

As are all Emerson plows, it is furnished complete with rolling coulter, singletrees and double trees, leaving you nothing to buy, being ready to hook on to as soon as you get it home.

**Quick Detachable Shares.** Equipped with our various plow bottoms with the quick detachable share in any size from 10 to 16-inch, in 10 in., 12 in., 14 in. and 16 in. Stubble, Turf and Stubble, Prairie Breaker, Slat or Rod Bottom. See pages 6 and 8.



### EMERSON EXPRESS GANG PLOW

The Express Gang is made entirely of steel and malleable iron (that is, iron that has been annealed so it will not break).

It has  $1\frac{1}{2}$ -inch axles and Long Distance Dust Proof wheel boxes in place of 1-inch and  $1\frac{1}{4}$ -inch axles used on other makes.

It is therefore strong and durable and a plow that is always ready. No time lost sending long distance for repairs for this plow is made to stand anything within reason.

We furnish as an extra for this plow, a corn planting attachment geared to the front furrow wheel. (See page 17.) A fine device for planting sod corn, sorghum, etc.

The attachment is simple in construction, durable and accurate, and is a money maker for the home maker.

Equipped with either Prairie Moldboard Bottoms or old ground bottoms, either turf and stubble, stubble or black or sandy land.

For style bottoms see pages 6 and 8.

You will note from the cut that the beams may be set close together for a 12-inch bottom or moved further apart for a 14-inch. This makes it possible to use 12-inch breaker bot-

tons for the prairie sod and 14-inch old ground for the backsetting and later plowing.

Notice the compact construction of this plow, all in a bunch and the load close to the team.

All friction is carried on the large  $1\frac{1}{2}$ -inch axles and magazine wheel boxes with bearings 4 to 6 inches longer than other makers' plows. We don't need tell you this means light draft as well as durability. See Fig. 7, page 4.

The plow turns a square corner either to the right or to the left without raising. It has a quick acting landing lever by which the front furrow wheel is kept always snug up in the corner of the furrow, insuring a full width of cut at all times, even though field may be irregular.

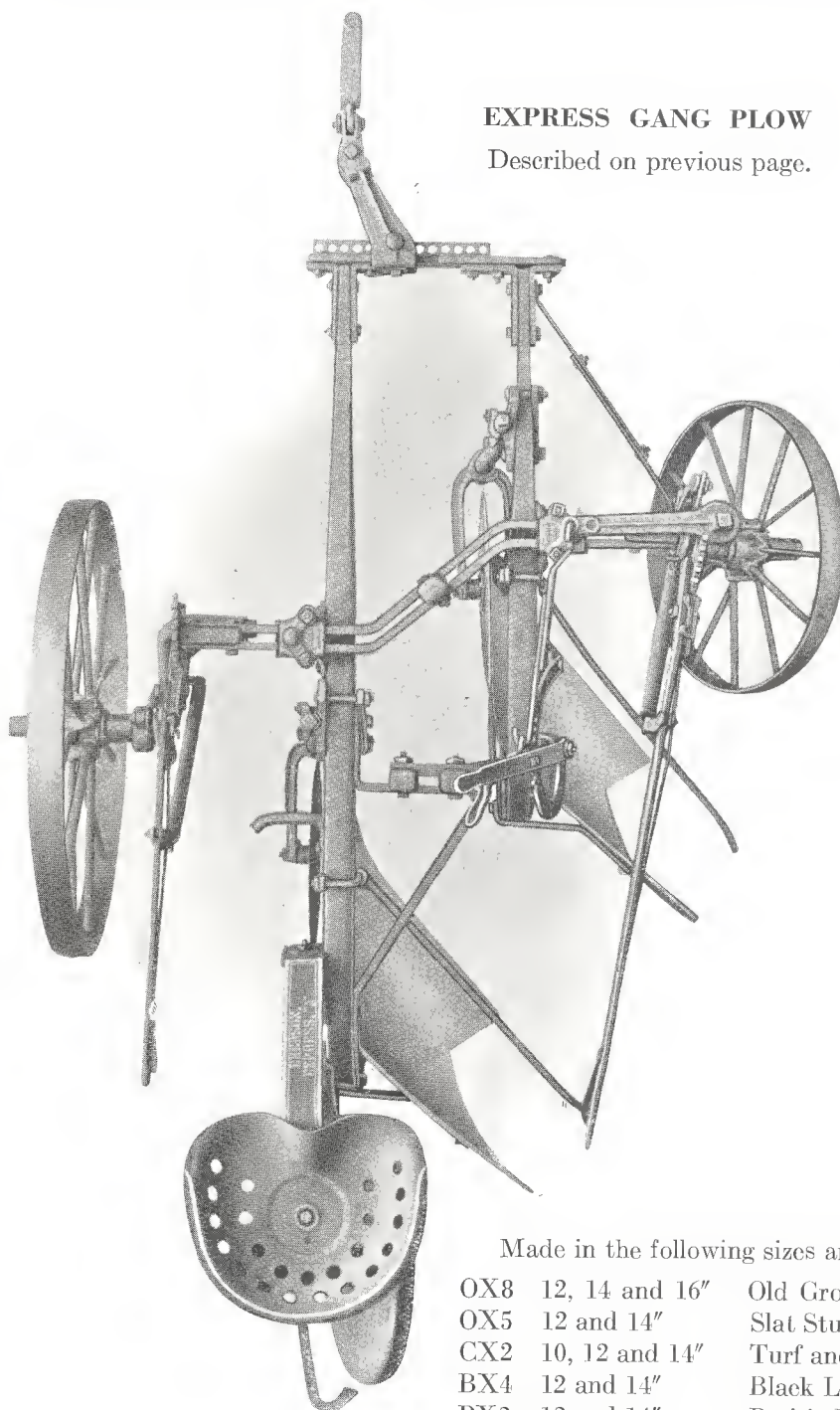
The front furrow wheel gauges the width of cut and it is therefore plain that it is this wheel that should be under the driver's control and not the clevis.

Furnished with Emerson common sense 4-horse hitch, so widely copied, and equipped with the same bottoms that have helped make Emerson Foot-Lift Plows the standard of excellence for the middle west.

See next page for sizes and styles bottoms.

**EXPRESS GANG PLOW**

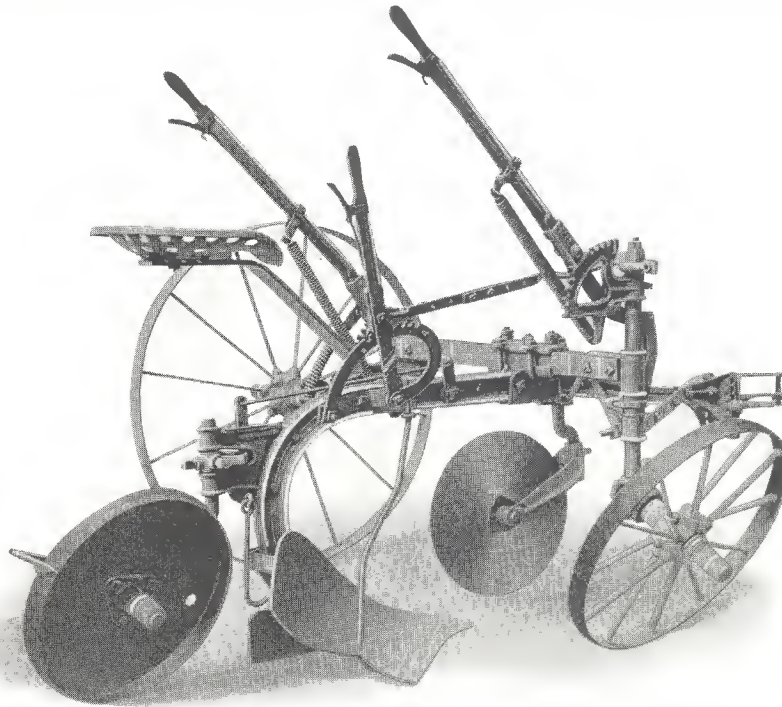
Described on previous page.



Made in the following sizes and styles:

OX8	12, 14 and 16"	Old Ground Bottom
OX5	12 and 14"	Slat Stubble Bottom.
CX2	10, 12 and 14"	Turf and Stubble.
BX4	12 and 14"	Black Land.
PX2	12 and 14"	Prairie Breaker.
PX9	12 and 14"	Rod Breaker.
XE	10 and 14"	Chilled.
XC	10 and 14"	Combination Chilled





### EMERSON EXPRESS SULKY PLOW

The Express Sulky is for the home maker who has fewer animals for plowing, consequently must be satisfied to do less work than can be done with the gang. The Express is built along the same durable lines as the gang with  $1\frac{1}{2}$ -inch axles the long bearings and the magazine dust proof oil tight wheel boxes. See page 4.

Constructed throughout of steel and malleable iron, there is not on the market its equal for durability.

The landing lever controls the front furrow wheel, giving the operator absolute control of the width of cut at all times.

The rear furrow wheel is solid pressed steel, equipped with scraper, which insures freedom from clogging and that the plow bottom will be carried in the proper position to secure the best results with the least possible draft.

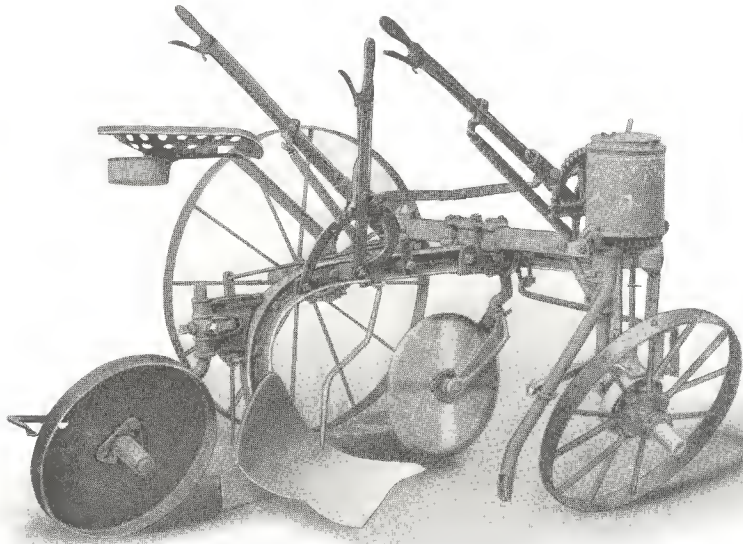
The sulky is regularly shipped without pole, but pole will be furnished when wanted. With 4 animals it goes either between the two teams or may be put next to the furrow if preferred.

It of course goes without saying that the features which make these plows so perfectly adapted to the use of the home maker in the new country, appeal equally to the requirements of the thrifty money maker in the older settled districts.

From the standpoint of acres they will turn per dollar invested, the Emerson Express stands at the top in a class by itself.

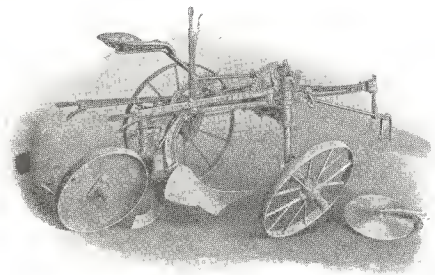
These plows are equipped with the famous E-B Quick Detachable Share shown on page 8, and are built in the following sizes and styles, shown on page 6.

OX8	12, 14 and 16"	Old Ground Bottom
OX5	12, 14 and 16"	Slat Stubble Bottom
CX2	10, 12, 14 and 16"	Turf and Stubble
BX4	12, 14 and 16"	Black Land.
PX2	12, 14 and 16"	Prairie Breaker.
PX9	12, 14 and 16"	Rod Breaker.
EX	10, 14 and 16"	Chilled.
XC	10, 14 and 16"	Combination Chilled



### EMERSON EXPRESS SULKY PLOW WITH PLANTER ATTACHMENT.

This cut shows the Dial Hitch also the planter attachment, which you will note has a positive gear connection to the front furrow wheel. There are no swinging toggle joints as on some attachments for this purpose, but the gear drive is always in line and perfect, insuring an accurate drop.



Emerson Express Sulky with Middle Breaker Bottom.

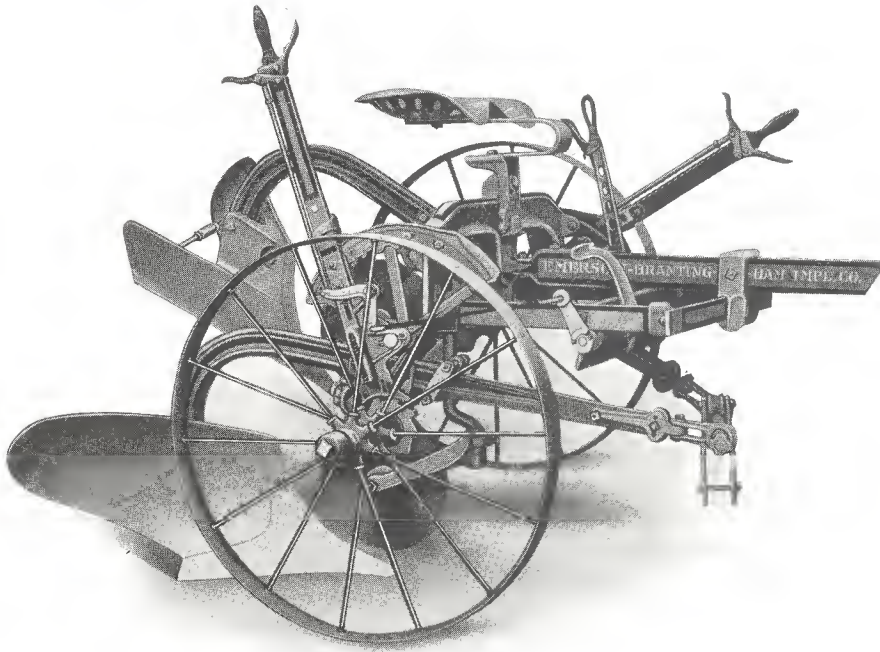
The dial hitch makes it possible to use 4 animals abreast on our common sense 4-horse evenner, so widely copied by other plow makers.

In many localities where listers and cotton planters are used it is necessary to "bust the

middles." This picture shows the Emerson Express Sulky Plow equipped with a middle breaker bottom and as this bottom is very inexpensive, when you get an Emerson Express Sulky and a middle breaker bottom you then have two splendid tools at a very low price.

The extra wear on the axles when using this as a middle breaker is not noticeable for the reason the wheels are equipped with the Emerson long distance magazine boxings and are running in oil. This plow may be attached with our regular clevis hitch instead of the dial hitch as shown.

This **planter attachment** shown on the plow above is used principally for export trade where the seed is deposited between the furrow slices a good deal in the same manner that the American Farmer plants his watermelon seed. This planter attachment is equipped with the same style box as used on our No. 10 planter; a round hole drop, and extra plates make it possible to vary the distance planted. A small device at the side of the hopper throws the planting mechanism out of gear so that the seed may be planted every other row or whenever the operator desires.



### THE EMERSON REVERSIBLE SULKY.

The Reversible Sulky Plow is made with either Combination or Full Steel bottoms mounted on steel beams and operated by separate levers, each lever being so made as to regulate not only the depth of cut, but to operate a power lift for raising the plows out of the ground.

The beams and bails are of steel, with ratchets, main levers and castings of malleable iron, which are renewable and add greatly to their wear. The Sulky is made with an adjustable pole which enables the operator to regulate the width of furrow. By means of this feature, good work is made possible in plowing hillside land, as it is easy to maintain the full width of the furrows. The beam, landside, wheel and pole run always in line. The furrow wheel moves ahead of the plow in proportion to the depth of the furrow turned, preventing the earth from being thrown into the wheel.

Shipped with the smaller bottoms and two horse hitch, unless the larger bottoms and three horse hitch are specified.

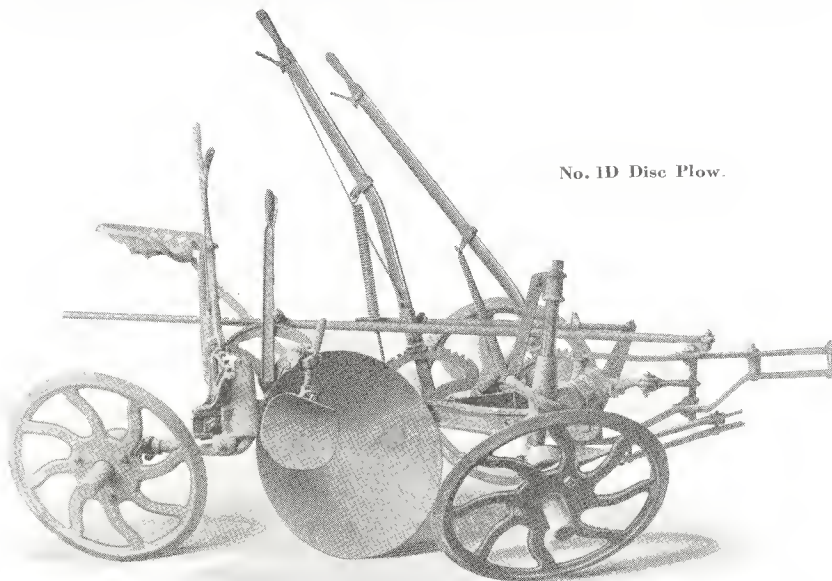
The plow can be used as either two or three horse. This is a self lift sulky plow and a riding plow with many good features. It is made very strong, and will do good work on hillsides and rough conditions of surface. In hillside work the landing lever permits inclining the carriage up hill at any angle desired and easily regulating the depth of furrow. Plows are raised from the ground by engaging a ratchet on the furrow wheel with the foot and the horses do the rest. Plow has a hitch to permit use of two or three horses. If desired, one plow bottom can be removed, as in the illustration, and have a perfect flat-land two wheeled sulky plow, one that is correctly balanced, and has no weight on the horses' necks. The Emerson Reversible Two Way Sulky Plow is made with twelve and fourteen inch bottoms, and in chilled, all steel and steel combination.

Two Way Plow with chilled bottom.

Two Way Plow with steel bottom.

Alfalfa shares can be furnished.



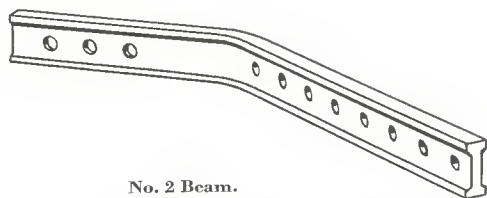


No. 1D Disc Plow.

## EMERSON HORSE DISC PLOWS

Made in 1, 2 and 3 Disc Sizes.

As a Disc Plow is most generally used when the ground is too hard to plow with a mold-board plow, strength is a most important factor. The frame of the "Emerson" is made of very tough extra quality steel thoroughly braced and bolted and reinforced with heavy parts where the strain is greatest.



No. 2 Beam.

This is a picture of the No. 2 Beam, which with disc, box and scraper, convert the single into a double disc plow. These parts can be added at any time. This feature is one that cannot be over-estimated in buying a disc plow.

The construction, as seen in the pictures of the 1, 2 and 3 disc plows, is such that should you buy a 2-disc plow and later want a 3-disc plow, another beam and disc could be added, or you can convert the 2 or 3 disc plow into a single disc plow as shown above.

The wheels are the justly celebrated 2,000-mile magazine box as shown on page 4 and are

securely fastened to the axle with the dirt proof cap, a most necessary feature to keep out the dirt and grit that wears axles when plowing in the dust. These wheels set in perfect alignment, are running in oil, and the discs turning on ball bearings, all make for light draft. The patent hitch connections featured only on the Emerson, not only control the front and rear wheels so that a short square turn to either right or left can be made, but the pull of the team holds the furrow wheel in track and the handy lever adjusts this hitch to its proper place so that the team is pulling square away.



No. 3 Beam.

This beam, with the disc, box and scraper, completes the No. 3 Disc Plow. This can be ordered and easily attached at any time in the future, should a larger plow be desired.

The view on page 21, shows the draft control of the front furrow wheel, the dotted lines showing the plow turning to the right. The wheel turns square about, without swinging back into the disc.

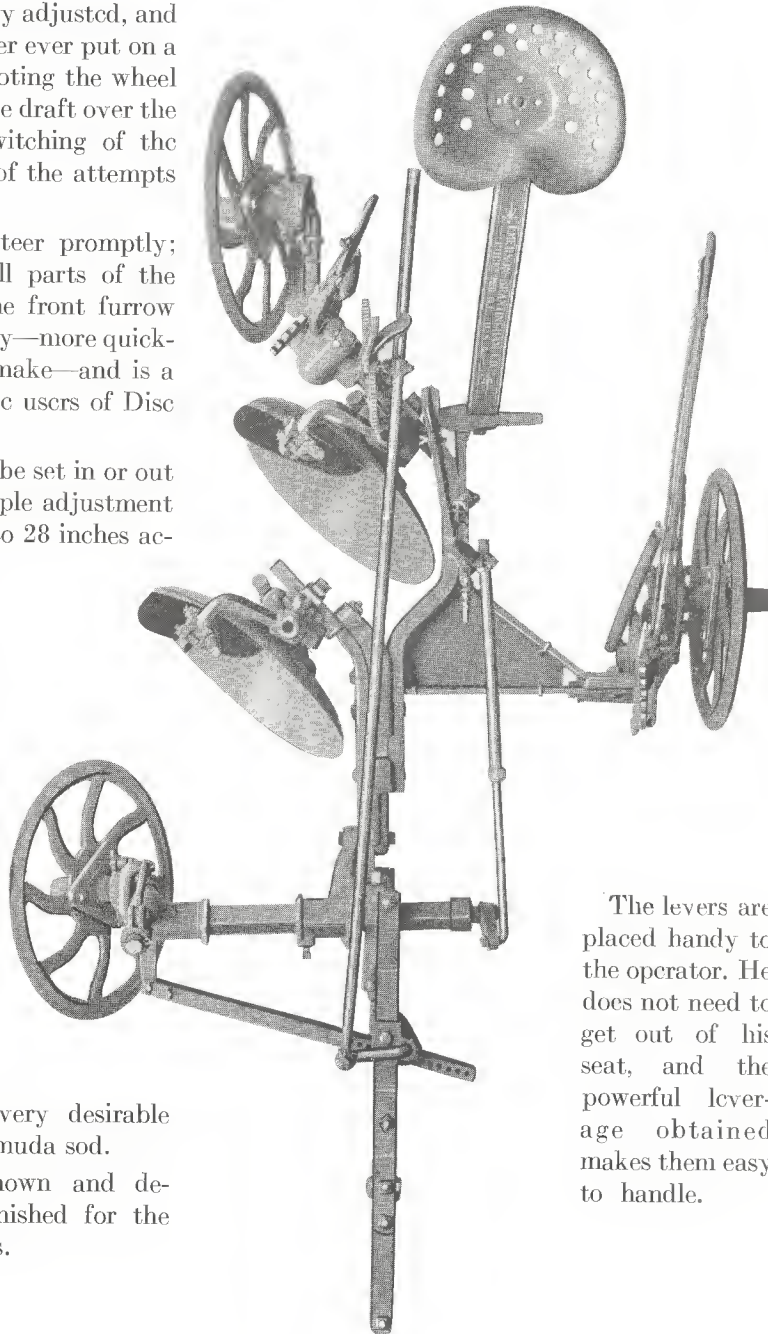
The width of the cut is quickly adjusted, and by the most easily operated lever ever put on a disc plow. The manner of pivoting the wheel axle gives a perfect control of the draft over the guiding of the wheel. No switching of the double-trees as found in some of the attempts to control the wheel by draft.

The Emerson Disc Plows steer promptly; that is, the construction of all parts of the Steering Lever is such that the front furrow wheel "minds the driver" quickly—more quickly than is done by any other make—and is a feature more appreciated by the users of Disc Plows than by the dealer.

This front furrow wheel may be set in or out to gauge width of cut by a simple adjustment and can be set to cut from 12 to 28 inches according to the depth run and number of discs used.

In very hard ground it is necessary to set the rear wheel at a greater angle to offset the pressure of the rear discs. This is easily accomplished as shown on page 21, by simply throwing the lever forward. The picture (page 22) shows the position of the rear wheel when traveling, making the plow track perfectly when out of the field. The direction of travel of rear furrow wheel may be changed by turning a set screw in the rear frame casting, which adjustment is very desirable when plowing tight land or Bermuda sod.

The Planter Attachment, shown and described on page 17, can be furnished for the Nos. 1D, 2D or 3D Disc Plows.

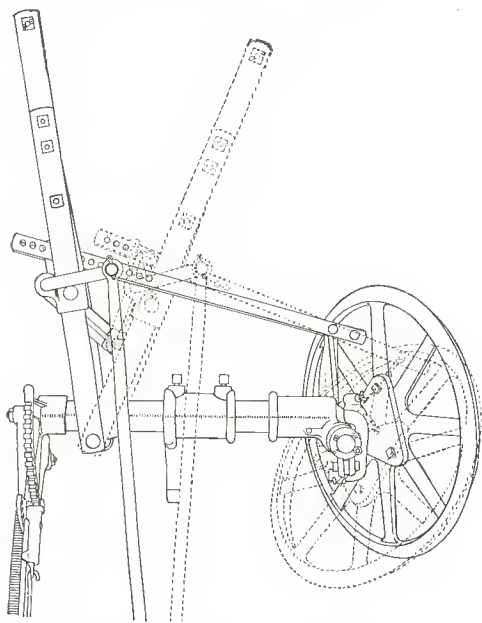


The levers are placed handy to the operator. He does not need to get out of his seat, and the powerful leverage obtained makes them easy to handle.

#### TOP VIEW No. 2D DISC PLOW

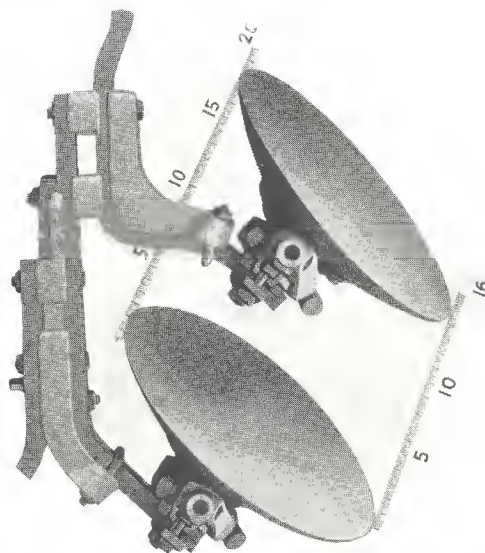
Note strength and ease of adjusting hitch.

It is claimed by some makers of disc plows that adjustments are detrimental, that the average farmer has not sense enough to adjust his plow properly. That

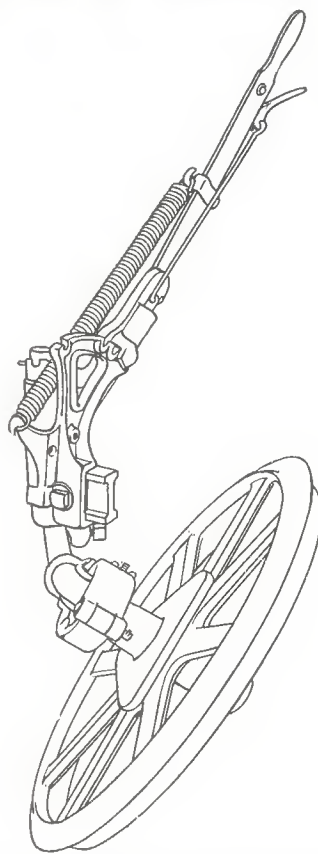


This view shows the draft control of the front furrow wheel, the dotted lines showing the plow turning to the right. The wheel turns square about, without swinging back into the disc.

there is but one true and proper set for the discs, and they intimate that they are the only people who have found the spot. The simple truth is, the average farmer has more sense in a minute about implements than some manufacturers can show in a week, which is proven every day by the kind of disc plows you find in the market. It stands to reason that as conditions in the ground change, the discs themselves should be adjusted to meet these changes to do the best work. By a very simple adjustment, the discs may be set to "scoop under" or to stand nearly perpendicularly, and another adjustment sets the discs "square to" the unplowed land or at a greater angle, and these adjustments become very necessary at times. The discs themselves are extra thick, very hard, and the tough "outside skin" is left on to make them wear longer and brighter polish is assured. The bearing to which the



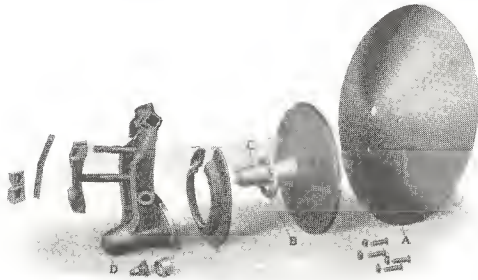
Top view showing front disc set at acute angle and rear disc set square to land, obtaining a 4-inch adjustment.



This shows our rear wheel in working position and slanted to resist the pressure of disc. Notice the dust proof, oil tight wheel boxes—the 2000-mile box that has helped make the Emerson Foot-Lift Moldboard Plows so popular.



dise is bolted is 14 inches in diameter, thoroughly supporting the disc and giving equal pressure on the ball bearings. The core part of this bearing is chilled hard as glass, as is the dirt proof journal (which is full of grease, and a compression cup keeps it full) and the chilled ball bearings (being held in a retainer)



**Oil Tight and Dust Proof Bearings.**

Detail showing Dust Bands on the left, Disc Journal and Box, Ball Race and Ball Retainers, and the Adjusting Block. The balls are of hardened steel,  $\frac{5}{8}$ -inch in diameter. No loose balls in this plow.

A, is Disc. B, is Ball Bearing with Retainer. C, is Chilled Cone. D, is Dirt Proof Bearing.

makes these discs revolve easily. It is no wonder the thousands of users say that the "Emerson" is the lightest draft disc plow on the market. The scrapers are adjustable to pitch and wear and they can be set to press hard or lightly against the disc as you desire.

**Summed up**, the exclusive features of the Emerson disc plow are:

Thrown out of and into ground from seat.

Turns square corner to right or left.

Slant of Dises adjusted for either sandy or gumbo soil.

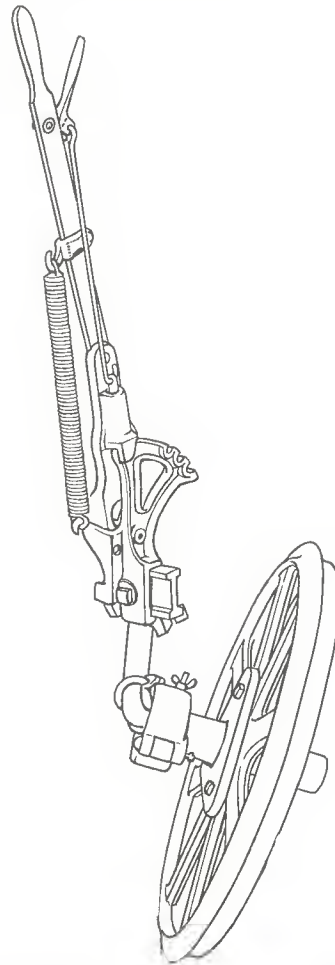
Width of cut controlled by operator or team.

The Rear Wheel can turn back to allow making practically a square corner.

Instantaneous acting lever.

Each plow convertible from one to two or three dises, or vice versa.

Dust proof and oil tight wheel bearings.



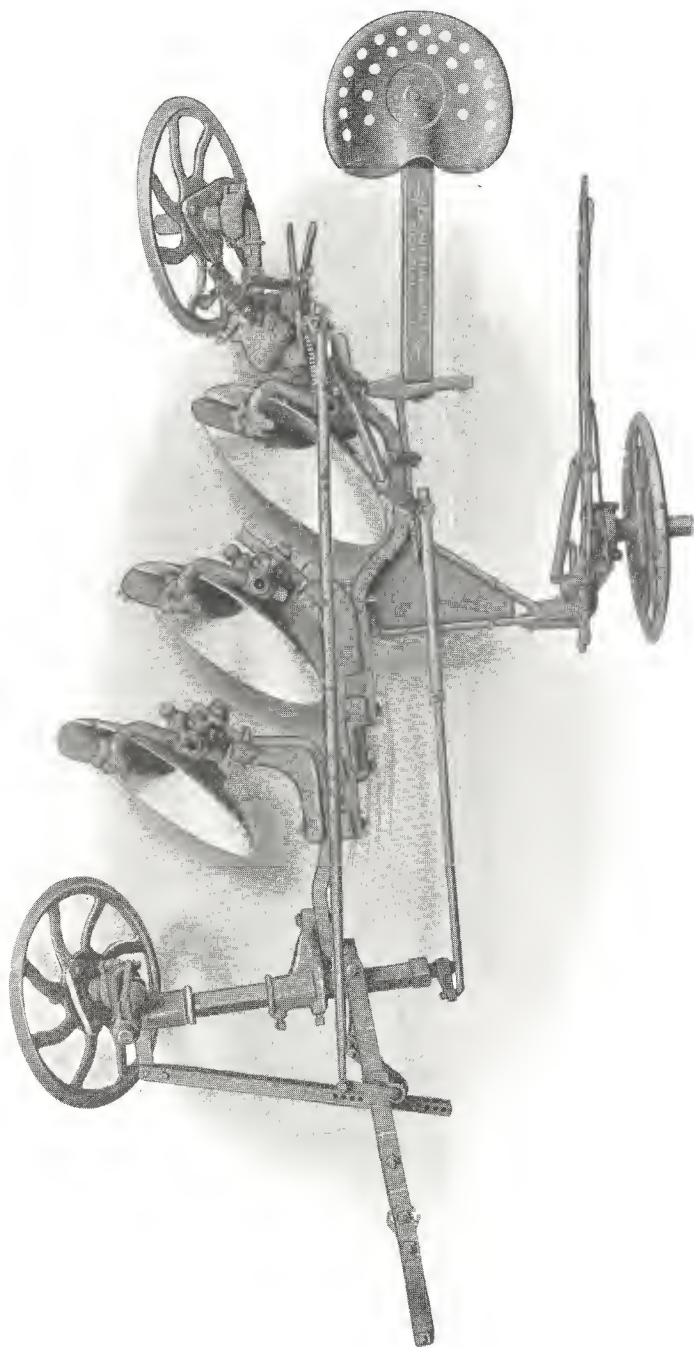
In this picture is shown how the wheel is thrown to nearly an upright position, and at the same time the disc lifted up high for transportation.

Dises run on adjustable and oil retaining ball bearings.

Rear lever provides ample depth of furrow in opening land and ample clearance on the road.

Compact, Strong, consequently Durable and Light Draft.

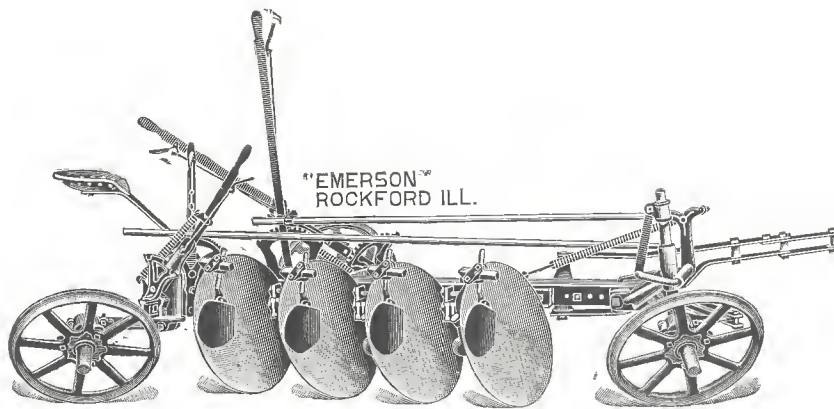
Get an Emerson Dise and plow your ground when you are ready to plow. The ground is then ready for seeding at the proper time and the result is a crop that will pay every year for your disc plows and leave you a nice profit in the bank.



After a day's work with this plow, the farmer can look over the field with a great deal of pride, as he has accomplished a great deal of work, and not only that, but he has done it with just one man, and his ground is in splendid shape. The larger sizes of disc plows pull but very little harder than a 2-disc plow, and owing to the ball bearing discs and the alignment of the wheels, as described in previous pages, this draft is reduced to a minimum.

Notice in the top view of this plow the heavy reinforcements of each disc beam, showing that it will withstand hard use.

TOP VIEW SHOWING THE No. 3D DISC PLOW.



### THE EMERSON 4B DISC PLOW

The 4-B plow shown above, is built especially for the hard abode lands of California for dry ground plowing, and it is meeting with high favor in other sections by reason of its simplicity, strength and durability. The rear disc and beam can be taken off, making a very satisfactory three disc plow when team conditions require. We can also furnish the same plow equipped with five discs when the number becomes a 5-B. Both of these plows are guaranteed to plow anything that can be handled with horse power, and while neither of them can be reduced to smaller than three disc, yet they have many features that recommend them over any other disc plow made.

The plows may be equipped with three or four 12-inch moldboard bottoms, either stubble or prairie breaker, or the beams and bottoms furnished extra so the plow may be used with discs when the ground is extremely hard, and when the ground is in good condition for plowing it can be used with the moldboard. For very trashy land or for deep plowing, this plow may be equipped with two 18-inch moldboard

bottoms, making a very good plow for burying a heavy growth of weeds or stalks. For stony land or stumps, the beams for moldboard bottoms may be equipped with spring trips, shown and described under engine plows.

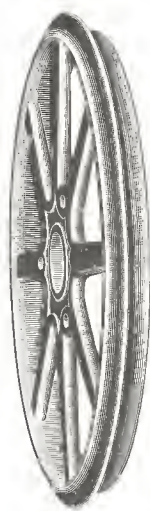
A great many light gasoline tractors are being sold in great many sections and this plow makes a most satisfactory rig for these small engines that have a traction capacity of 8 H. P. or over.

In using these plows behind a tractor, it is necessary for you to specify that it is to be used with an engine, as a different hitch is used than when it is being pulled with horses. All of the features in the way of adjustable discs, the ball bearings, the long wheel box, the ease of manipulating and light draft, are found in this plow as described in the preceding pages regarding our regular disc plow. We only recommend this plow for light engine work, but we will be glad to send you our regular engine plow catalogue which describes thoroughly all of the different styles and types of both disc and moldboard plows to be used behind an engine.





"V" Wheel.

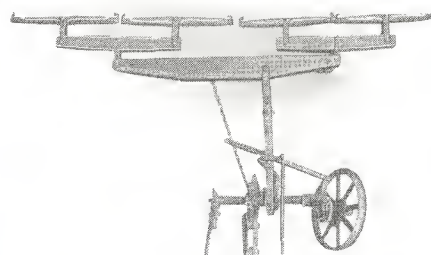


Flange Wheel.



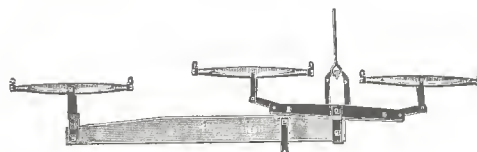
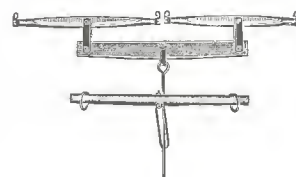
Flat Wheel.

To meet different conditions, we build Nos. 1, 2 and 3 Standard Disc Plows with either three "V" shaped wheels for black land, or one flat and two flange wheels for sandy land plowing.

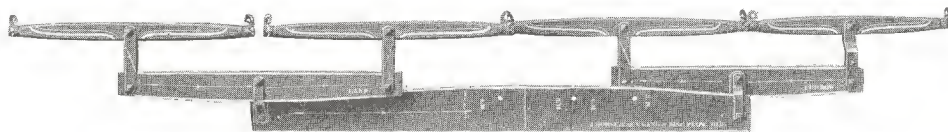


4 Horse Chain Hitch.

The 4 Horse Chain Hitch can be furnished at a small advance in price over the regular hitch.



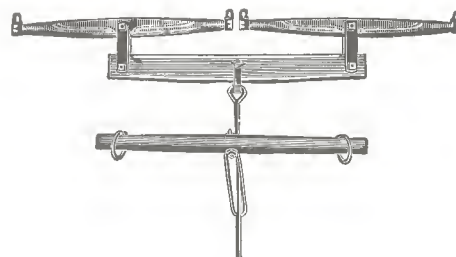
Regular 5 Horse Hitch for No. 3D Plow.



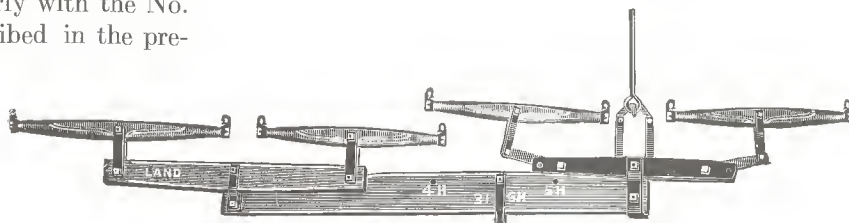
This Hitch Furnished with No. 2D Disc Plow.



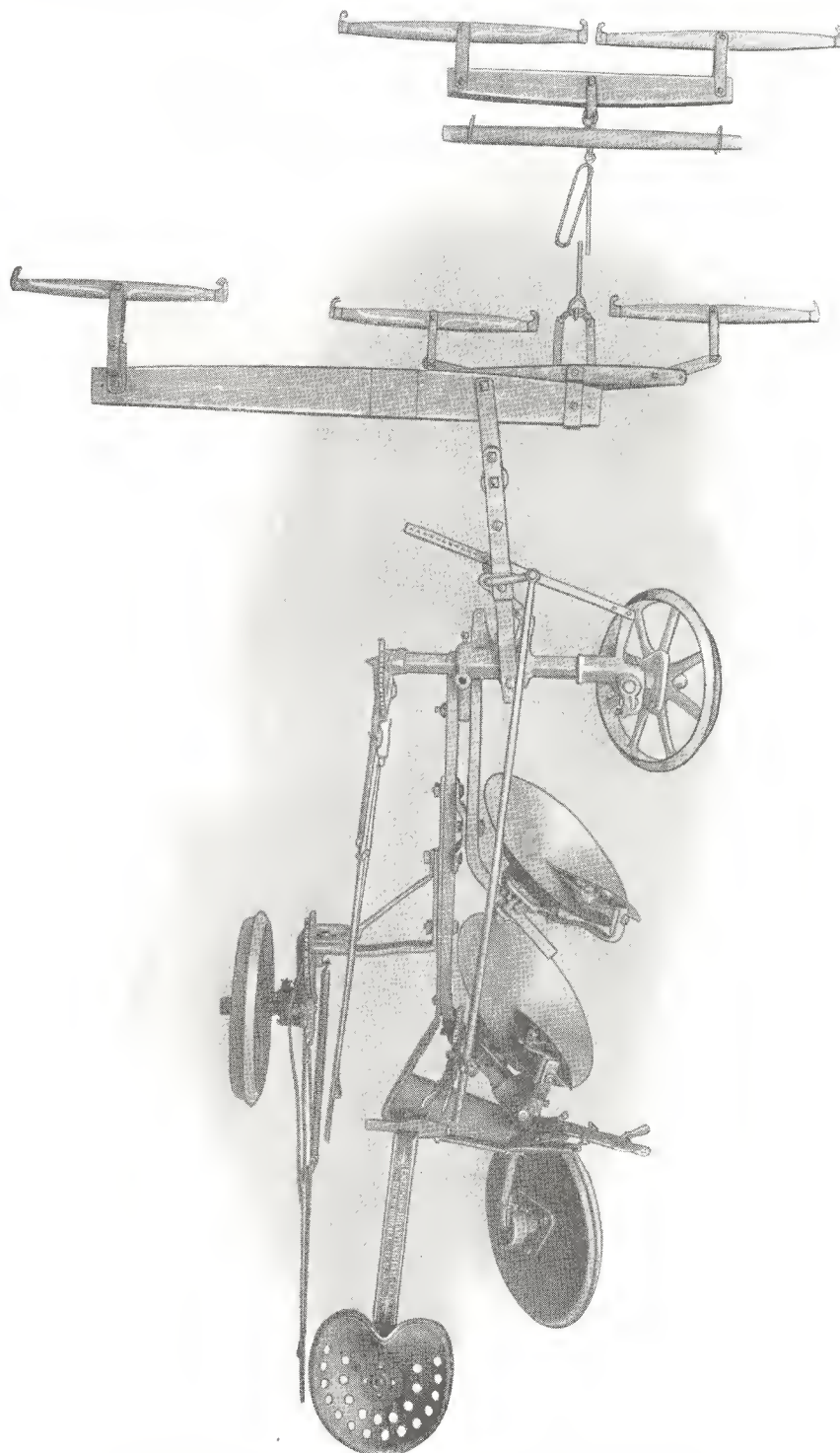
Regular 3 Horse Hitch for No. 1D Disc Plow.



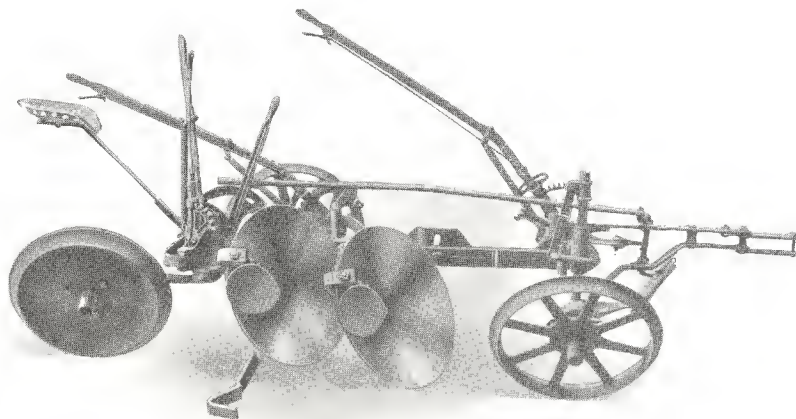
The 6 Horse Combination Hitch shown here is furnished regularly with the No. 4B Disc Plow as described in the previous page.



The 6 Horse Combination Hitch.



EMERSON No. 2C DEEP FURROW PLOW.



### THE EMERSON DEEP FURROW PLOW.

Plowing is fundamental, and deep plowing means a deeper surface soil and more feeding area for plant roots. In the South, crop yields on several demonstration farms have been doubled by deep plowing. Before, the lands were only shallow plowed, and deep tillage was the equivalent of turning up a new farm that lay below. Deep plowing is especially recommended for fall, as it holds the winter rains and snows, and the freezing breaks up the soil particles, greatly improving the physical condition. This is just as important as having a rich, fertile soil, for unless we have the proper physical condition the crops cannot take plant food—it is locked in the soil. From many parts of the country have come messages from practical farmers on the good results of deep plowing. Twenty, thirty and forty per cent. increases have been reported.

Probably the greatest results with the deep furrow plow have been obtained in the semi-arid sections of the Northwest as deep plowing there is the most efficient means of conserving moisture. The rains are absorbed on a deep porous field as far down as it has been plowed.

In the Corn Belt and the South it has been found the best practice to plow a couple of inches deeper each year gradually developing

a deep surface soil, the sub-soil filling with humus and being converted into a rich surface soil. In some sections of the Northwest good results have been reported from deep plowing the first year.

The Emerson Deep Furrow Plow is so made that it will successfully turn a furrow from eight to ten inches wide, and 14 to 16 inches deep, enabling the user to plow his ground at such depth as desired. This same plow can be so set as to turn two perfect furrows each eight to ten inches wide and six to eight inches deep, which makes a successful plow for work at the usual depth.

The Emerson Deep Furrow plow will plow the hardest soil to a depth of twelve to sixteen inches, as set by the operator. It covers the trash completely, and thoroughly pulverizes the soil. The use of this plow means less work afterward in preparing the seed bed. We will give you practical and accurate information as to the advisability of deep plowing on your farm, and would like to hear from you regarding your location and soil conditions.

Because of the fact that it is customary in certain sections to do deep plowing in the fall and medium work in the spring, we have produced a machine that will plow deep, or it can



be quickly changed to turn two furrows of ordinary width and depth. In the one machine you have a deep furrow plow and a general purpose plow that has all the features of the No. 2D disc plow described in the preceding pages. and can be used at all seasons when a disc plow can be used.

### Emerson Construction

The construction of frame, axles, wheels, discs that have had years of trial on the Emerson Disc Plows have been incorporated in the Emerson Deep Furrow Plow. It is time tried in its construction even though the principle of its operation is new.

### Better Mixing of Surface and Subsoil

Some of the deep tilling plows have given poor results due to the subsoil being turned up completely on top of the furrow. To overcome this and do proper work our plow is constructed with the rear disc set to take a slice of furrow from top and bottom and with this feature the soils at the top and bottom of the furrow are mixed more completely than by any other method. A patent has been applied for on this construction.

A most serious defect in most deep furrow plows is their liability to tip over when turning to the right—in fact, they can not be turned in the furrow as there is no control of the front wheel. The Emerson Deep Furrow Plow has draft control of the wheel and pilots the plow the same as if a pole or tongue were used. A patented feature is the means of controlling the relationship of the draft and the wheel by the operator on his seat. The width of cut is quickly adjusted and by the most easily operated lever ever put on a plow, giving a

front furrow wheel that minds the driver quickly. This gives more or less width of cut to the discs and enables the plow to make a much shorter turn than in any other way.

### Patented Rear Wheel

The rear wheel adjustment is also patented. A lever affords means of changing angle of the wheel in the furrow (see page 21) according to depth at which the plows run, thus keeping the resistance of the discs square upon the rear axle and prolonging the life of the plow.

### SPECIFICATIONS

**Frame.** The frame is made of tough extra quality steel and thoroughly braced and bolted.

**Wheel Bearings.** Oil Tight and Dirt Proof. A couple of lubrications will run an entire season. (See page 4.)

**Levers.** Levers are conveniently placed—no more of them than necessary for the proper and easy management of the plow.

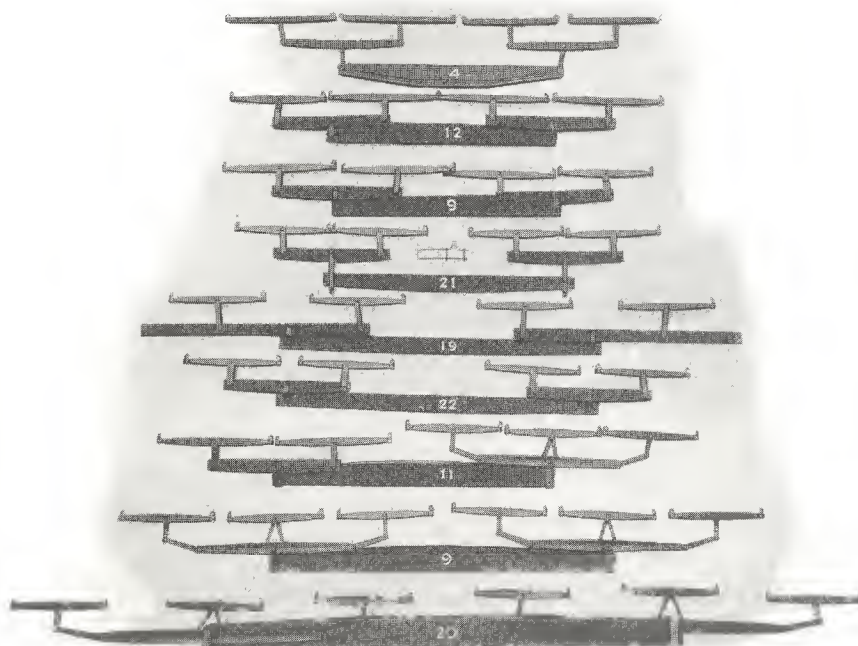
**Discs.** The Discs are 26 inches in diameter, plow turn, of the best quality of polished steel. The Disc Bearings are dirt proof. (See page 22.)

**Adjustments.** The Discs can be given such set or angle as may be needed to meet the requirements of the conditions of the soil.

**Raising Discs.** The Discs are raised up or forced down by means of a convenient lever.

**Cleaning.** The Scrapers are adjustable to pitch and wear. Can be set to press hard or lightly against the disc as circumstances require.

**Hitch.** A five horse hitch for three horses abreast and two in the lead. (See page 26.)



### A FEW HITCHES FOR THE E-B LINE

No. 4. 4-horse steel evener with steel singletrees for Footlift Gangs, Express Gangs and No. 2 Disc Plow. Shipped when ordered.

No. 12. 4-horse wood evener with wood singletrees—Regular Hitch for Left Hand Emerson Gang.

No. 9. 4-horse wood evener with wood singletrees—Regular Hitch for Footlift and Express Gang and Disc Plows.

No. 21. 4-horse wood evener with wood singletrees—Regular Hitch for 7, 8, 9 and 10-ft. Disc Harrows.

No. 19. Combination 3 or 4-horse wood evener and singletrees—Regular Hitch for all

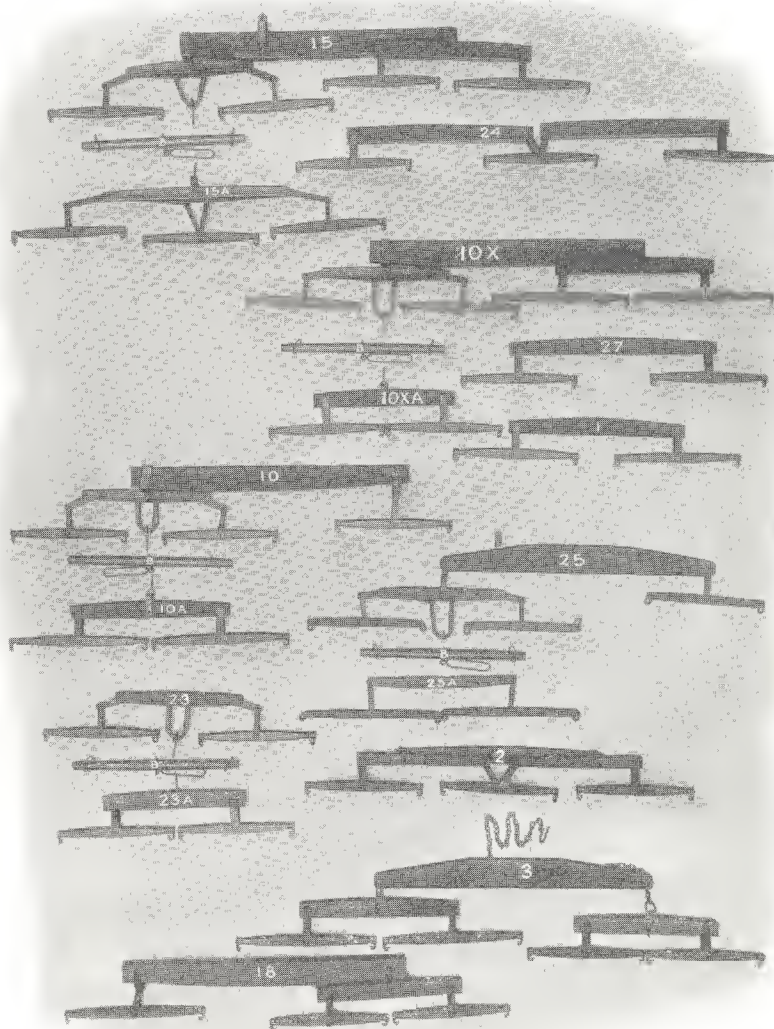
one-row Riding Listers.

No. 22. 4-horse wood evener with wood singletrees—Regular Hitch for No. 28 Corn and Cotton Planter.

No. 11. 5-horse abreast wood evener—Steel tripletrees, wood singletrees. Can be used on Emerson Express Gang Plows or Disc Plows.

No. 6. 6-horse abreast wood evener—Steel tripletrees, wood singletrees. Can be used on Disc Harrows.

No. 20. 6-horse abreast wood evener—Steel tripletrees, wood singletrees. Regular Hitch (when ordered) with all two-row Listers.



### A FEW HITCHES FOR THE E-B LINE

No. 15 with 15A—7-horse wood evener with steel doubletrees and tripletrees—4 horses abreast and three in lead regular hitch for Emerson Triple Gang and 4B and 5B Disc Plows.

No. 10X with 10XA—6-horse wood evener—4 horses abreast and 2 in the lead, with one steel and one wood doubletree regular 6 horse combination hitch. See page 25.

No. 24—3-horse abreast wood hitch. Regular hitch for two-row stalk cutters.

No. 27—2-horse wood evener. Regular with No. 1 and No. 2 Ridge Buster.

No. 1—2-horse wood evener. Regular with Side Delivery Rake. Shipped when ordered with Planter, Stalk Cutter, four and five-foot Disc Harrows and Hay Rake.

No. 10 with 10A—5-horse wood evener, steel and wood double-

rees. Three abreast and two in lead. Shipped when ordered with Emerson and Express Gangs and Disc Plows.

No. 25 with 25A—5-horse steel evener, steel double and singletrees. Three abreast and two in lead—5-horse tandem. Regular on O7-14-8 Gang. Other Gangs when ordered.

No. 23 with 23A—Four horse tandem—steel and wood doubletrees. Shipped when ordered for Emerson and Express Sulkies and Gangs and Disc Plows.

No. 2—3-horse abreast wood evener. Regular with Express Sulky Plow.

No. 3—4-horse abreast chain hitch—steel evener, wood doubletrees. Shipped when ordered with Gang and Disc Plows.

No. 18—3-horse abreast wood evener. Regular with No. 1 Disc Plow.



# EMERSON COMBINATION 2-3-4-5 and 6-Horse Hitch

WITH THIS HITCH YOU HAVE ANY COMBINATION FOR ALMOST ANY MACHINE.

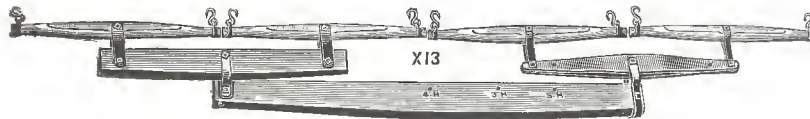


Fig. 4. The 4-Horse Hitch Combination—4 horses abreast.

Fig. 1 Shows the Complete 6-Horse Hitch. All Other Hitches Shown on This Page Are Made From it.

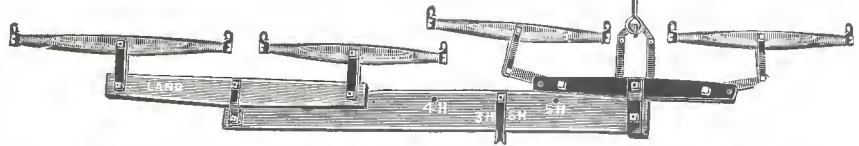


Fig. 1. The 6-Horse Hitch Combination—4 horses abreast and 2 in the lead.

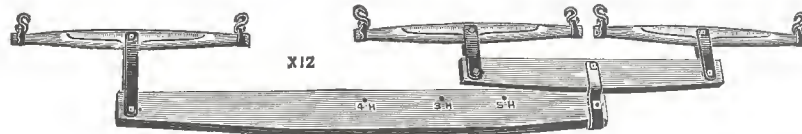


Fig. 5. Regular 3-Horse Abreast Sulky Hitch.

Can be Made a 2-Horse Hitch by Removing the Doubletrees.

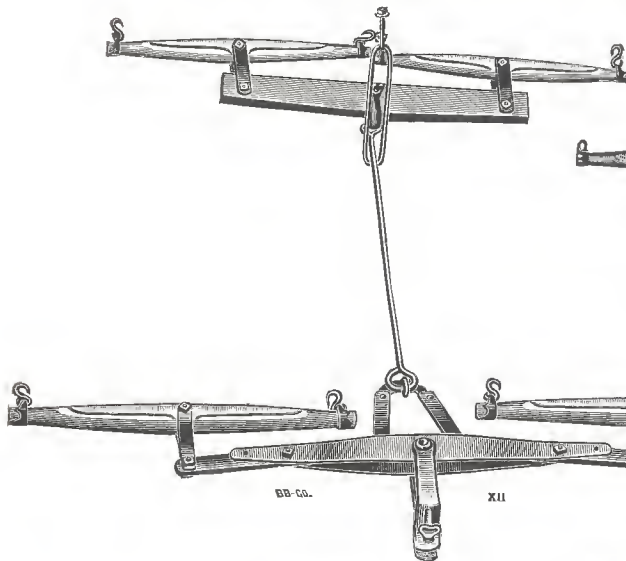


Fig. 3 Shows a 4-Horse Tandem Hitch, a Splendid Way to Hitch 4 Horses in Very Hot Weather.



Fig. 2. The 5-Horse Hitch Combination—3 horses abreast and 2 in the lead.





Emerson No. 102 Power Lift Plow

Emerson Quick Detachable Share, Removeable in 3 seconds, replaced in 5 seconds. No tools—only the hands.

Showing slots, studs and levers. The Patented features of the Emerson Quick Detachable Share

Showing the studs in slots ready for locking. Notice the leverage secured by the cam movement, the most powerful of mechanical levers.

One pull of the lever forces Share in position when lever joint passes the center and locks solid. The hook at right fore finger acts as an additional lock.



**EMERSON-BRANTINGHAM IMPLEMENT CO., INC.**

Good Farm Machinery.

**ROCKFORD, ILLINOIS.**

Established 1852.